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The Relationship Between Teachers' Perceptions of Principals' Job Performance, Teacher Job Satisfaction, Principal Influence and School Outcomes.

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THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTIONS OF PRINCIPALS' JOB PERFORMANCE, TEACHER JOB SATISFACTION, PRINCIPAL INFLUENCE AND SCHOOL OUTCOMES

The Louisiana State University and Agricultural and Mechanical Col. ED.D. 1986

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THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTIONS OF PRINCIPALS' JOB PERFORMANCE, TEACHER JOB SATISFACTION, PRINCIPAL INFLUENCE AND SCHOOL OUTCOMES

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
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in partial fulfillment of the
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in

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and Supervision

by
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ABSTRACT

This study investigated the relationship between principals' instructional leadership behavior and school effectiveness. In the conceptual model tested, certain school context variables, teachers' job satisfaction and teachers' willingness to accept principals' influence in the instructional realm, were viewed as mediating the relationship between principals' behavior and school outcomes. From this perspective, principals' instructional leadership behavior was seen as being indirectly related to school outcomes by its impact on these mediating variables. For the purposes of this study, teachers' job satisfaction, teachers' willingness to accept principals' professional advice and teachers' perceptions of principals' effectiveness as instructional leaders served as independent variables. School outcomes, achievement and average daily attendance, served as dependent variables.

A mixed matrix sampling procedure was used wherein elementary teachers (n=506) in sample schools (n=47) responded to two of the three instruments used to measure the independent variables. Correlational analyses were undertaken to determine the magnitude and direction of the relationships between independent and dependent variables, mediating variables (independent variables which mediated

the relationship between principal behavior and school outcomes), sample descriptive data and dependent variables. Additionally, regression analysis were performed to identify a linear combination of independent variables which could best explain achievement and school attendance variations in the data.

Analyses of the data indicated a significant relationship ($p < .05$) existed between teachers' perceptions of principals' effectiveness as instructional leaders and school attendance. All other correlations between independent and dependent variables were not statistically significant ($p > .05$). A significant relationship ($p < .001$) was established between teachers' perceptions of principals' job performance and one of the school context mediating variables, teachers' willingness to accept instruction-related advice from their principals. Major results of the study did not establish a direct relationship between principals' instructional leadership behavior and school outcomes. However, considered collectively, the results served to partially confirm relations between principal behavioral inputs, school mediating variables and school outcomes identified in past research and documented a significant positive relationship between principals' instructional leadership and influence on teachers as well.

CHAPTER I

INTRODUCTION

Identifying effective schools and the means to create more of them have become pivotal concerns in the work of an increasing number of educational researchers and practitioners during the past decade. This movement has provided a body of research that supports the traditional American belief that good schools can and do enhance student learning through the actions they take.

The effective schools movement gained its impetus from research which revealed a significant number of unusually effective schools located in poor and minority neighborhoods. This led researchers to assume that these successful schools had common identifiable characteristics which resided within the domain educators could manipulate. Implicit in this assumption was the conviction that these traits could be easily transferred to less effective schools.

The efforts of teachers and school administrators were seriously discredited by research in the mid-sixties. Research conclusions like those formulated by Coleman (1966) had a questionable effect on the improvement of the American educational system. The Coleman report concluded that school resources have little impact on student achievement

that is independent of the student's family background and socioeconomic status. Hypercritical and often despairing messages about the ability of schools to educate children emanated from this dismal conclusion. Teachers, principals, and district level administrators were ready to hear more hopeful news. Consequently, educators have enthusiastically accepted the results of the "effective schools" research of the early seventies.

The effective schools movement provided the hard data to support misgivings many educators had concerning Coleman's findings. As the number of studies focusing on successful schools began to increase, observers noticed a clustering of common sense characteristics inherent in these schools. While lists varied in detail, features such as strong instructional leadership, an orderly school climate, high expectations, emphasis on basic skills, and frequent monitoring of instructional progress stood out as major areas within the control of successful educators (Educational Research Service, 1985). These features had an intuitive appeal to most individuals knowledgeable about schools and their organizational and social structures. Researchers found that even when schools were matched on student background and socioeconomic characteristics, differences in student achievement levels corresponded with differences in school management and instructional processes (Vallina, 1978; Gigliotti and Brookover, 1975; Brookover,

Gigliotti, Henderson, and Schneider, 1973).

Effective schools research findings have provided significant implications for America's public school principals. Investigators have pinpointed the importance of instructional leadership, especially the role of the principal in coordinating and controlling the instructional program, as a determinant of school effectiveness. This conclusion has led to an increased demand for improved administrator preparation through in-service workshops and seminars aimed at developing building level administrators' skills in instructional leadership. These developments underscore Edmonds' (1979) remark that

> one of the most tangible and indispensable characteristics of effective schools is strong administrative leadership, without which the disparate elements of good schooling can neither be brought together nor kept together (p. 22).

Despite evidence that links strong instructional leadership from the principal to dramatic "turnaround" success stories in case studies of inner-city schools and broad-based research, there remain weak points in the effective schools research which must be addressed. Bossert, Dwyer, Rowan, and Lee (1982) cautioned against overextrapolating findings from research on effective schools to principals' instructional leadership role. Recent research yields an incomplete picture of the inner workings of effective schools. According to the researchers, the impact of some context variables (such as

teacher autonomy and instructional management practices) on administrators' success at implementing school effectiveness principles has not been adequately accounted for in past effective schools research. Additionally, Cuban (1984) suggested that school administrators' roles as instructional leaders may be constrained by school and district organizational variables (e. g. district level involvement, informal structure). Furthermore, Cuban points out that research linking improved student achievement to specific principal leadership behaviors is lacking. Recent effective schools research correlates a general notion of leadership with high student achievement. Consequently, a dire need exists for investigating the conceptual framework reported in the "effective schools" literature. Such an investigation would render a more sound conceptual base for understanding the school environment relative to the leadership actions of principals.

Conceptual Framework

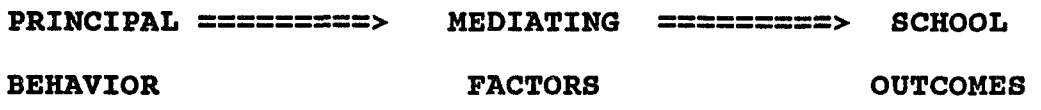
The behavioral style of organizational leaders has been extensively researched since the early twenties. Frederick Taylor (cited in Basil, 1970) set out to improve organizational outcomes and reduce losses by minimizing inefficiencies in the organization. Taylor felt there was always one best method for doing any particular job and this

method could be determined through scientific study. He reasoned that low productivity and wasteful situations in business and industry were due to faulty management and "soldiering" (work slowdowns) among employees. Managerial establishment of standardized procedures for each position in the organization, a system of worker financial incentives and time-motion studies to eliminate useless motions were some of the suggestions Taylor proposed to improve worker productivity. Although somewhat suited for business and industry, Taylor's principles have been criticized for their lack of applicability to educational settings. Callahan (1962) suggested that the efforts of scientific managers of the early twentieth century were not intended to produce the greatest educational outcomes at the lowest cost but merely to attain the lowest per pupil cost regardless of the quality of educational programs.

Unlike his efficiency-oriented predecessors, Mayo (1933) felt that the social system within an organization hid the answers for improving organizational outcomes. Mayo, along with other writers of this period known as the "human relations movement", encouraged organizational leaders to assume a relationship-oriented leadership style as opposed to a task-oriented style in which emphasis on production outweighed humanitarian concerns. Scores of other leadership models have been constructed which incorporate notions from both the scientific management and

human relations eras. Halpin (1966), Blake and Mouton (1964) suggest two dimensions of leadership style, concern for people and concern for production. Fiedler (1967) enriched the leadership framework by viewing leadership effectiveness as being contingent on certain situational factors (task structure, leader position power, and leader-member relations).

These leadership formulations require more explanation when school effectiveness is the concern. The school is a social system in which outcomes such as student achievement and attendance are affected by a myriad of mediating factors (most notably, teacher performance). Unlike business-oriented organizational leaders, principals' behaviors have an indirect effect on organizational outcomes. Thus, a theoretical model of organizational effectiveness for schools can be depicted as follows:



Ellett and Walberg (1979) suggested that the relationships in this model may well be reciprocal as to causality, where school outcomes condition and shape mediating factors and future behavioral actions of principals.

Extensive research has been conducted to refine this theoretical framework. More recently, effective schools

researchers have sought to disclose school characteristics which show relationships to unexpectedly high achievement among low socioeconomic schools. Case study approaches utilizing on-site observations, interviews and questionaires provided much of the early information about school effectiveness and principal behavior. However, extensive reviews of both case study and more quantitative research findings suggest that principal leadership behaviors impact on student achievement primarily through the effect they have on the school's instructional program (Educational Research Service, 1983). In order to understand the relationship between principal leadership behavior and student achievement, Ellett and Walberg (1979) suggest the following diagram:

PRINCIPAL ====>TEACHER ====>STUDENT ====>STUDENT OUTCOMES

The school effectiveness literature extends the explanation of the leadership role of the principal when compared to more direct causal models. The principal is viewed as impacting the school environment by influencing teacher expectations, directing resources, providing in-service training for teachers and by taking an assertive role in the instructional program. Yukl (1971) proposed a conceptual approach for understanding leadership effectiveness which explains how effective principals impact

school outcomes. He suggested that the leader's behavior patterns affect situational variables (subordinate motivation, and subordinate skill levels) that in turn affect the quality and quantity of subordinate performance. In essence Yukl proposes that principal effectiveness operates primarily through teacher motivation and job performance.

An empirical test of a similar model was undertaken in Project ROME - Results Oriented Management in Education, a statewide project that was implemented in Georgia from 1974 to 1978, identifying and validating performance competencies for public school principals. During Project ROME, relationships between principals' behaviors and a number of teacher, student and school variables were investigated. Of all the variable relationships examined, the strongest and most frequently occurring were those between teachers' perceptions of characteristics of the school environment and their assessments of the behavior of the school principal (Payne, Ellett, Poole, and Pool. 1976). The most predictable mediating variable related to achievement was a measure of teacher perceptions of multiple dimensions of the work environment, the School Survey (Coughlan and Cooke, 1974). Stated succinctly, the ROME study revealed that in schools where the principal is perceived by teachers as frequently and effectively performing certain behaviors in the school environment, teachers' attitudes toward

dimensions of their work environment are positive and show strong associations with school outcomes (attendance and pupil achievement).

Statement Of Purpose

The general purpose of this investigation was to examine the relationships between principal performance, teacher job satisfaction, and principal influence in order to broaden our understanding of effective schools as complex social systems. For this investigation, a conceptual model was constructed showing relationships between these variables and their link to student outcomes.

The conceptual framework was tested to explain the complex interplay between the array of behaviors which were classified as instructional leadership in orientation, mediating factors in the school environment and student outcomes.

More specifically, the objectives of this study were to:

1. Determine the relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and the school outcomes of student achievement and attendance.

2. Determine the relationship between teachers' job satisfaction and the school outcomes of student achievement and attendance.

3. Determine the relationship between the degree to which principals influence teachers' instruction-related behaviors and the school outcomes of achievement and attendance.

4. Determine the incremental validity of teachers' job satisfaction, principals' influence on teachers' instruction-related behaviors and teachers' perceptions of the effectiveness of principals' instructional leadership behavior in predicting the school outcomes of student achievement and attendance.

5. Determine the relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and the degree to which principals influence teachers' instruction-related behaviors.

6. Determine the relationship between teachers' perceptions of the principals' instructional leadership behavior and teachers' job satisfaction.

7. Determine the relationship between teachers' job satisfaction and the degree to which principals influence teachers' instruction-related behaviors.

Significance of the Study

A recent survey (Odden and Dougherty, 1982) pointed out that most states had underway school improvement programs of one form or another that reflected the recent effective schools literature. Interest in this topic has spurned increased development of in-service activities designed to instruct educators in the nuances of effective schools.

It has been an often repeated finding of recent effective schools research studies that the principal is fundamental to the overall improvement of learning and school success. Nearly every case study in the Phi Delta Kappa Case Studies (1980) singled out the building principal

as a critical factor contributing to progress in student achievement (cited in Educational Research Service, 1983). This finding is paralleled by that of the Educational Research Service (1983) in an extensive review of effective schools literature. Principals who exert strong leadership and implement an ordered and structured environment are determining factors in differentiating "turnaround" schools from their troubled counterparts. Such principals seem to be instrumental in setting the tone of the school, helping to decide on and implement instructional strategies, and organizing and distributing school resources.

Nevertheless, school effectiveness research thus far has neglected to quantitatively delineate which variables in the school environment are impacted by principal leadership. It has been proposed that principal behaviors relate indirectly to student achievement as they impact on teacher variables (Ellett and Walberg, 1979). However, school effectiveness research yields a list of prescriptions for success delineating the impact of principals' behavior on many variables that mediate school outcomes.

Two important teacher variables which may mediate principals' behaviors and consequences of these behaviors are: (1) the amount of influence teachers are willing to accept from their principals; and (2) teacher job satisfaction. Bossert et. al. (1982) asserts principals' leadership operates through their exercise of influence on

teachers. Research has shown that teachers' perceptions of principals' competencies are related to teacher conformity levels to certain policies the principal espouses (Warren, 1968). It is posited here that the ability of principals to influence their staffs is a determining factor in their success as school change agents. Consequently, principals' attempts to enact beneficial instructional changes can be enhanced by their ability to influence staff members. The degree to which teachers are influenced by their principals is contingent upon their perceptions of the principals' job-related competencies.

Teacher job satisfaction is another school context variable which can impact on the consequences of principals' behaviors. Teachers' perceptions of the work environment, like teachers' acceptance of principals' influence, is related to teachers' perceptions of principals' performance of job competencies (Pool, 1976). Furthermore, teachers' attitudes toward dimensions of their work environment have been found to be strongly related to student achievement (Payne, Ellett, Poole and Pool, 1976) and teachers' overall agreement with principals' educational styles (Safe Schools Study, 1978 cited in Educational Research Service, 1983).

Project ROME - Results Oriented Management in Education, a statewide research and development project in Georgia, tested a credible model depicting the social context into which the principal's behavioral intentions are

infused. The theoretical framework investigated in the ROME project is depicted in Figure 1-1.

Of all the variable relationships examined, the strongest and most frequently occurring were those between teachers' perceptions of characteristics of the school environment and their assessments of the behavior of the school principal (Payne, Ellett, Poole, and Pool. 1976). The most predictable mediating variable related to achievement was a measure of teachers' perceptions of dimensions of the educational/work context. Stated briefly, the ROME study revealed that in schools where the principal is perceived by teachers as frequently and effectively performing certain behaviors in the school environment, teachers' attitudes toward dimensions of their work environment are positive and often show strong connections with school outcomes (attendance and pupil achievement).

However, the ROME effort represents only an initial probe of relationships between principal behavior and variables mediating its relationship to school outcomes. This study extends the ROME effort by expanding the ROME conceptual model in view of the effective schools research. In addition to the two school context variables examined in Project ROME (teacher satisfaction, and teachers' perceptions of principal performance), principal influence is examined using the Professional Zone of Acceptance

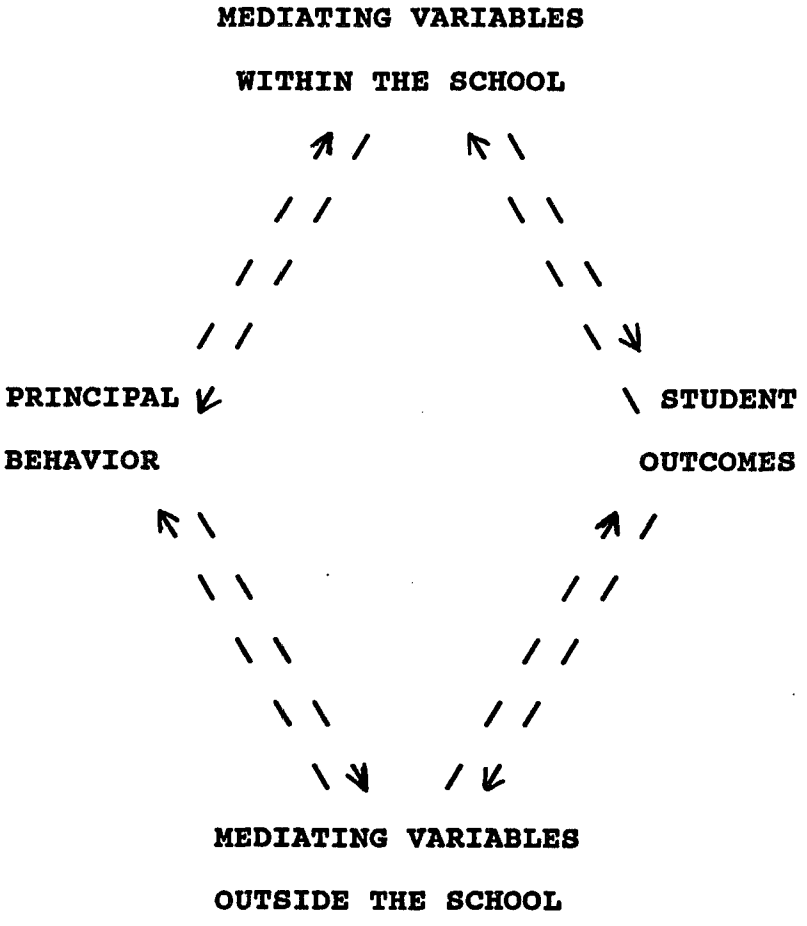


Figure 1-1

Theoretical framework examined

in Project R.O.M.E.

Inventory (PZAI). Principal influence is investigated by examining its relationship to teacher job satisfaction, teachers' perceptions of principals' job performance and student outcomes. The interrelationships between these three context variables and their combined relationship to indices of school productivity are also examined.

The conceptual model tested in this study is diagrammed as follows:

PRINCIPAL <==> TEACHER PERCEPTIONS <==> TEACHER <==> STUDENT
BEHAVIOR 1. Job Satisfaction PERFORMANCE OUTCOMES
2. Principal Influence

It should be noted that the relationships in the model might be reciprocal which suggests that the directions of the relationships may not be one way causal paths. In this study, no attempt was made to assess reciprocal causality between variables in the model. It was assumed that principal behavior (input variable) impacts certain teacher perceptions which, in turn, relate to teacher performance and student outcomes. In addition, the effectiveness of principals as instructional leaders is measured by teacher perceptions of their performance in this job competency. Teacher perceptions of the strength of certain school context variables have been shown to be valid indices of the

magnitudes of these variables (Payne, Ellett, Poole and Pool, 1976).

Findings from this study will be useful in understanding the interrelationships between school context variables and their contribution to school outcomes. This will allow for more comprehensive and inclusive theoretical notions in educational administration by encompassing these school effectiveness findings emanating from the research. Additionally, the study could add to the criterion related validity of the three instruments involved in the study for predicting student productivity.

Results could serve to clarify the broad statements which are presently used in the literature to describe the role of effective principals. Principal training programs could benefit greatly by incorporating information gained from the study into a concise set of principal behaviors useful for improving student outcomes. Finally, findings from this study should also enhance policy making and resource allocation relative to school outcomes.

Hypotheses

Specific research hypotheses of the proposed study stated in predictive form are presented below. Each hypothesis is followed by a brief rationale which includes findings from pertinent research literature.

1. There is a positive relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and the school outcomes of student achievement and attendance.

Rationale

The conceptual model under investigation in this study incorporates certain theoretical notions from the leader behavior framework suggesting an indirect relationship between principal behavior and student outcomes. According to (Yukl, 1971), the organizational leader - organizational outcome relationship is fostered by the linkage between leader (principal) performance and subordinate (teacher) performance. Spady (1973) noted a clear and consistent relationship between teacher performance and school effectiveness in a review of school outcomes studies. Accordingly, the conceptual scheme predicts teacher performance and its concomitant student outcomes vary directly with the quality of the instructional leadership provided by the principal. Effective instructional leaders facilitate school environments which are perceived by students and teachers as challenging and successful (Educational Research Service, 1985). The conceptual scheme proposes that this teacher perception of effective principal leadership is related to two school variables, teachers' satisfaction and teachers' willingness to accept principal

influence, which may have consequences for student achievement and attendance. Teachers' who perceive that they are part of an effective instructional program should be motivated toward higher levels of instructional performance and professional growth.

Past research consistently points to instructional leadership from the school administration as a critical factor contributing to the success of the school. The building principal emerged as the key figure in effectuating overall improvement in learning in case studies of successful inner city schools (Weber, 1971; Vallina, 1978; Venezky and Winfield, 1979; Levine and Stark, 1981; and Felsenthal, 1982), broad-based studies of successful schools in low socioeconomic status neighborhoods (Armor, 1976; and Edmonds, 1979), and broad-based studies which compared successful versus unsuccessful schools in rural, urban and suburban settings (Brookover and Gigliotti, 1975; Brookover, Beady, Flood, Schweitzer and Wisenbaker, 1977; Maryland State Department of Education, 1978; and Brookover and Lezotte, 1979).

2. There is a positive relationship between teachers' job satisfaction and the school outcomes of student achievement and attendance.

Rationale

According to the conceptual model of this study, principals' behavior impacts certain aspects of the job environment which positively correlate with teacher performance and school outcomes. Teacher job satisfaction is incorporated into the model due to the theorized relationship between subordinate job satisfaction with aspects of the job environment and job performance. The model suggests that teachers who are more satisfied with the working environment perform better in the classroom than their less satisfied counterparts due their greater motivation to work. This analysis can be carried one step further to propose that more satisfied teachers are more motivated toward achieving greater levels of personal instructional performance and student outcomes than teachers who are less satisfied with the work environment. Past research has provided general support for the feasibility of this hypothesis. High levels of teacher job satisfaction has been found to be positively correlated with staff morale (California Effectiveness Study, 1977) espirit de corps (Fetters, Collins and Smith, 1968), and willingness to innovate or accept change (Venezky and Winfield, 1979) -factors which have been associated with effective learning environments (Educational Research Service, 1983).

3. There is a positive relationship between the degree to which principals influence teachers' instruction-related behaviors and the school outcomes of student achievement and attendance.

Rationale

The low frequency of principal supervision in most schools allows teachers wide discretion in choosing the curriculum they teach and the instructional strategies they employ in the classroom (Weick, 1982). Due to its importance, this teacher autonomy norm is recognized in the theoretical framework of this study. The conceptual model proposes that effective principal behavior can influence teachers' instructional behaviors. French and Raven (1960) suggest that competent organizational leaders acquire "expert" power which can be enacted to attain organizational goals. Research in school settings has shown that principals can potentially influence teachers' classroom performance (Bossert et. al., 1982; Guditus and Zirkel, 1980). Warren (1968) revealed that teachers' perceptions of their principals' competence affected their willingness to accept their principals' influence. Assuming that principals who are perceived by teachers as being effective are actually competent instructional leaders, the hypothesized relationship between principals' influence on

teachers' instructional techniques and choice of materials and teacher performance seems reasonable.

4. There is a significant multivariate relationship between the school outcomes of student achievement and attendance and teachers' job satisfaction, principals' influence on teachers' instruction-related behaviors and teachers' perceptions of the effectiveness of principals' instructional leadership behavior.

Rationale

In the conceptual scheme of this study, principal behavior relates to student outcomes through its impact on three school context variables - teachers' perceptions of principals' effectiveness as instructional leaders, principals' influence on teachers' instruction-related behaviors and teachers' job satisfaction. Thus, student outcomes result from a combination of effective principal behaviors, teachers' levels of job satisfaction and the degree to which teachers accept administrative suggestions and directives for improvement. Consequently, it is difficult to order the magnitude of the contribution each variable offers in explaining school productivity. No studies are known that have attempted to establish this multivariate relationship between indices of school outcomes and the three independent variables investigated in this

study. However, research conducted during Project ROME, a research effort which investigated a conceptual scheme closely resembling the model in this study, found that teachers' perceptions of principal behavior were related to a selected measure of teachers' attitudes toward multiple dimensions of their work environment which, in turn, was linked to school attendance and achievement (Payne, Ellett, Poole and Pool, 1975).

5. There is a positive relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and teachers' job satisfaction.

Rationale

According to the conceptual model under investigation, two school context factors mediate the relationship between principals' behaviors as perceived by teachers and school outcomes. These mediating factors are teachers' job satisfaction, and principals' ability to influence teachers' instruction-related behaviors. Relationships among these two variables and teachers' perceptions of principals' performance as instructional leaders (principal performance) are viewed as reciprocal. One relationship which might be extrapolated from the relationships among these variables concerns the link between teachers' perceptions of

principals' instructional leadership ability and teachers' job satisfaction. Here, it is suggested that teachers who perceive that their schools are being led by toward higher levels of educational excellence will be more satisfied with their working environment than teachers in schools led by less effective instructional leaders. In other words, teachers want to be associated with these successful instructional programs because of the personal satisfaction and professional growth these working environments offer. House (1971) theorized that the structuring behavior (task direction) of effective administrators is motivational to the extent that it clarifies for subordinates the best path to the goal of good performance. During the California School Effectiveness Study (1977), researchers found teachers in higher achieving schools were more satisfied with their work relationships with their principals. These instructors rated their principals higher on general performance standards and on specific standards of helpfulness.

6. There is a significant positive relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and the degree to which principals influence teachers' instruction-related behaviors.

Rationale

In the theoretical framework on this study, principal behavior indirectly impacts school outcomes through its relationship with two related context variables. Teachers' perceptions of principals' instructional leadership behavior and one of these context variables, the degree to which principals influence teachers' classroom behaviors, are believed to be closely related. Principals' effectiveness at gaining a position of influence in the instructional realm may depend on the extent to which they demonstrate success in developing and instituting ideas related to the instructional programs of schools. This hypothesis is consistent with the notion that subordinates are willing to take directions or advice from leaders who appear to subordinates as successful or knowledgeable in the subordinates' tasks. French and Raven (1960) refer to this sort of perceived knowledge and competence as "expert power". In view of the reported reluctance of teachers to accept principals' advice concerning classroom matters (Lortie, 1969), this notion of administrative legitimacy seems particularly applicable to school settings.

7. There is a significant positive relationship between teachers' job satisfaction and the degree to which principals influence teachers' instruction-related behaviors.

Rationale

Relationships between mediating variables in the conceptual model of this study are viewed as reciprocal. Furthermore, this interrelationship is believed to be positive in direction. Following this line of reasoning, a positive relationship should be established for teacher job satisfaction and principals' influence on teachers' classroom behaviors. It is suggested that a cooperative atmosphere is a natural outgrowth of teacher job satisfaction. Principals should be better able to enact significant school-wide instructional changes if and when teachers are satisfied with the work environment. The Safe Schools Study (National Institute of Education 1978) found high teacher morale was composed of several important dimensions. Among these were high job satisfaction and general agreement among teachers with their principals' educational and procedural styles. This finding supports a correlation between teacher conformity and teacher satisfaction (since both contribute positively to the overall atmosphere among teachers in a school) and it suggests that teachers who are more satisfied with various dimensions of their working environment will accept advice and suggestions from their principals more willingly than less satisfied teachers (cited in Educational Research Service, 1983).

Definition of Terms

The principal terms of this study are:

Instruction-Related Behaviors: classroom activities undertaken by teachers for the purpose of administering the school curriculum to students.

Principals' Instructional Leadership Behavior: the effectiveness of the principal in his/her ability to direct the instructional tasks of the school and channel instructional resources as perceived by teachers in the school. This variable will be operationalized by scores on the Principal Performance Description Survey (PPDS) (Ellett and Payne, 1976).

Influence (successful): the internalization of values, preferences and priorities of an influence agent resulting in related overt behavior by an influence recipient. This variable will be operationalized by scores on the Professional Zone of Acceptance Inventory (PZAI) (Kunz, 1973)

Teacher Job Satisfaction: teachers' negative or positive feelings relative to certain dimensions of their working environment. This variable will be operationalized by scores on a modified version of the Job Satisfaction Scale (JSS) (Johnson, 1955)

Student Productivity: school mean achievement as measured by the results of standardized achievement tests (Science Research Associates Achievement Series, 1978) and

an index of student average daily attendance.

Statistically Significant: a relationship between variables that reaches or exceeds the .05 level of statistical significance.

Assumptions

1. Elementary teachers' perceptions are valid for assessing the job performance of school principals.
2. The principal performance measures used possess job-related validity.
3. Teachers' self-reported job satisfactions are important variables mediating the effects of principals' instructional leadership behaviors.
4. Teacher conformity to principals' instructional styles and values is an important variable mediating the effects of principals' instructional leadership intentions.
5. The content of the Principal Performance Description Survey reflects performances of principals that are essential for instructional leaders.
6. The Professional Zone of Acceptance Inventory is a valid measure of teachers' willingness to comply with principals' directives (accept influence) in the area of instruction.
7. The Job Satisfaction Scale is a valid measure of overall teacher job satisfaction.

8. One-way causal paths exist between variables in the model tested in this study. It is assumed that principal behavior impacts two school context variables (teacher job satisfaction and teachers' willingness to accept their principals' influence) which, in turn, relate to teacher performance and school outcomes.

Limitations

The generalizability of the results obtained from this study may be limited by the number and nature of schools in the sample and the data collection design of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

For a long time researchers have been concerned with studying and isolating school factors which impact student achievement. Some earlier input-output studies focused on easily quantifiable characteristics such as teacher experience, number of support staff, number of library books and reported dismal results as to effectiveness of America's schools. However, more recently researchers have looked at constructs such as leadership, staff relations, communication, school climate, instruction and program consistency and coordination. Wide variations between school effectiveness have been associated with these school context factors. These results support the beliefs of many educators that measuring school effectiveness involves more than summing the tangible resources available to schools. But rather, school outcomes emanate from complex social systems with interacting factors which come together to either create an educational environment that can foster or inhibit school outcomes.

The following literature review synthesizes research findings related to school effectiveness, teachers' job satisfaction, principal influence and student outcomes,

respectively. The chapter is subdivided according to these areas. Results and findings from related studies in these areas will be presented to provide rationale for the research hypotheses outlined in the introductory chapter of this study. Related study characteristics and gaps in research will be examined in order to support the need to further study the variables in this investigation as they are linked to student productivity.

School Effectiveness Research

The body of research concerning school resources and student achievement contains numerous studies with conflicting results. Several research reports released during the late sixties and early seventies claimed that the amount of variation in student outcomes attributable to school inputs was negligible when compared to the amount attributable to student background characteristics. Most notable of these studies is the Coleman Report (1966). The U. S. Department of Justice initiated this survey so that willful discrimination in education could be documented. One thousand one hundred seventy high schools and 3,223 feeder elementary schools were selected for the study's sample. About 70 percent of the schools selected for the survey actually participated in the study yielding 645,000 student participants. The main conclusions of the Coleman (1966) study were:

1. The great importance of family background for high achievement.

2. The relationship of family background to achievement does not diminish over years of schooling.

3. Variations in school facilities, curriculum and staff have little effect on achievement independent of family background.

4. School factors that have the greatest influence (independent of family background) are the teacher characteristics not the facilities and curriculum.

5. Attitudes, such as sense of control of the environment or a belief in the responsiveness of the environment, were found to be highly related to achievement.

From these results, Coleman et. al. (1966) concluded that:

> schools bring little influence to bear on a child's achievement that is independent of his background and general social context; and that this very lack of an independent effect means that the inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities with which they confront in adult life (p. 325).

Coleman's findings don't go as far as to completely discredit the need for schooling. The report indicates that schooling has a great and important effect on students of all socioeconomic levels. However, Coleman concluded that it is difficult to identify school-related variables that account for differences in the effects of schooling between schools.

Several years later, Jencks (1972) echoed findings similar to Coleman's conclusions. Jencks' work directly attacks the common sense proposition that student

performance is closely related to the quality of the school. Jencks found only weak relationships between indicators of "good" and "high quality" schooling and measures of student achievement. What determines how well a student performs on a given test, Jencks argued, has a great deal to do with that student's IQ score and his or her socioeconomic status and race, but very little to do with the characteristics of the school that the student attends. Consequently, efforts to equalize school resources would have little or no impact on the inequality of performance among different groups in school.

After a careful review of educational effectiveness research, Armor (1972) also disclosed discouraging news concerning the relationship between in-school differences and school outcomes. In a report to the President's Commission on School Finance, Armor concluded that his investigation had not identified a variant of the existing educational system that was consistently related to students' educational outcomes. However, the report emphasized that it was not being suggested that nothing makes a difference, or that nothing works. Rather, that research had not yet established meaningful school-related factors that consistently and unambiguously made a difference in student outcomes (cited in Educational Research Service, 1983). Ellis (1975), after comparing ten elementary schools judged successful and ten elementary

schools judged unsuccessful in teaching reading to children from poor inner-city neighborhoods in Massachusetts, also concluded that there was no single pattern of school factors that determined excellence.

A wide body of the research literature contains results differing sharply from the negativism expressed in the aforementioned studies. During the early seventies, a number of researchers set out to disprove studies which found no school factors which were significantly related to school outcomes. Of particular concern in many of the studies was the identification of schools that were unusually effective in teaching basic skills to poor and minority children. More recently this body of literature has been referred to as "effective schools" literature.

Weber (1971) was an early contributor to the literature on the school determinants of achievement. His study of four inner-city public elementary successful in teaching reading was intended to refute the findings of researchers who believed that low achievement by poor children derived principally from inherent disabilities characterizing the poor. Successful reading instruction was defined according to two criteria: (1) at the third grade level, the school's reading achievement median equalled or exceeded the national norm; (2) the school had an unusually low percentage of nonreaders at the third grade level.

All four schools in Weber's study had strong leadership

in that their principal helped to set the tone of the school, helped in decisions concerning instructional strategies and organized and distributed school resources. All four schools had high expectations for all their students. Additionally, all of the schools had an orderly, relatively quiet, and pleasant atmosphere. Finally, all four schools strongly emphasized pupil acquisition of reading skills and reinforced that emphasis by frequent evaluation of pupil progress.

The State of New York's Office of Education Performance Review (1974) published a study that confirmed some of Weber's major findings. The study identified two New York City public elementary school, both of which served predominantly poor pupil populations. One of the schools consistently had high reading achievement scores while the other school consistently scored low. The study revealed that the differences in student performance between the two schools seemed to be attributed to alterable variables under the schools' control. Administrative behavior, policies, and practices in these schools appeared to have a significant impact on school effectiveness. The more effective inner-city school was led by an administrative team that provided a good balance between management and leadership in instructional skills. This administrative team successfully implemented a cohesive plan for remediating low reading scores. Additionally, unlike their

unsuccessful counterparts, professional personnel in the effective school were optimistic about their ability to have an impact on their students' learning and were less likely to attribute their students' reading problems to nonschool factors (cited in Educational Research Service, 1983).

In a more rigorous and sophisticated version of the Weber and New York studies, the California School Effectiveness Study (CSES) compared 21 pairs of California elementary schools matched on the basis of school size, locale, students' socioeconomic status, and percentage of minority enrollment. The paired schools differed in sixth grade test scores on the Comprehensive Tests of Basic Skills. One school scored higher than what was predicted from student characteristics and the other scored far lower than what was predicted. Among the strongest findings of from the CSES was the importance of teachers' perception of administrative support at both the school and district levels. Several teacher characteristics emerged as important determinants of school effectiveness in the study. Teachers in the higher achieving schools, in comparison to teachers in lower achieving schools:

1. were more task oriented in their classroom approach and exhibited more evidence of apply appropriate principles of learning,
2. spent more time on social studies, less time on mathematics, and about equal time on reading,
3. reported higher levels of access to "outside the classroom" resources,

4. believed their faculty had less influence on educational decisions,

5. rated the district administration higher on support services,

6. had fewer paid aides in reading and were more apt to use them for nonteaching tasks,

7. divided classrooms into fewer groups for purposes of instruction, and

8. reported being more satisfied with various aspects of their work.

The most extensive effective schools research thus far has been conducted by Brookover (1973, 1975, 1977, and 1979), who teamed with various associates to perform a series of studies involving elementary schools in Michigan. Brookover, Gigliotti, Henderson and Schneider (1973) studied twenty-four elementary schools in Michigan using research techniques similar to those used in the California School Effectiveness Study (1976). Pairs of schools were selected whose members were similar in student body racial composition, students' socioeconomic status and community type but differed in mean fourth grade student achievement. Student achievement as measured by scores on the Michigan State School Assessment Achievement Index (MSSAAI). The contributions of ten school climate variables measuring student and teacher perceptions were studied in a linear regression analysis. The most powerful predictor of high achievement was a lower sense of futility by students in higher achieving schools. Other significant predictors of

achievement were expectations teachers held for their students, student initiative, and students' perceptions of expectations regarding their academic ability.

Brookover and Gigliotti (1975) chose five pairs of Michigan elementary schools differing in mean achievement as measured by the MSSAAI. However, similar to the previous study, the pairs of schools were alike in their racial composition, students' socioeconomic status, and community type. School locales varied from rural to suburban to town settings. All ten buildings had predominantly white student populations. The following variables were investigated: teachers' and principals' evaluations of students, teachers' and principals' expectations of students, students' perceptions of the expectations held for them by their teachers, principals and parents, students' aspirations, students' sense of control, teacher press for educational achievement, community stability and parental support level. With socioeconomic status and racial composition statistically controlled, the results revealed that higher achieving schools scored significantly higher on all of the variables. Students' sense of control showed the greatest relationship to student achievement.

In 1977, Brookover, Beady, Flood, Schweitzer and Wisenbaker conducted an extensive study of school effectiveness drawing three samples from 2,226 Michigan elementary schools. The "state sample" consisted of 68

randomly selected schools (61 predominantly white, seven predominantly black). The 61 predominantly white schools in the state sample comprised what was known as the "white sample". The seven predominantly black schools were combined with 23 other schools randomly selected from a population of majority black schools to form a "black sample". The researchers investigated relationships between 14 climate variables, nine personnel inputs (e.g. teacher experience, teacher education, school size) and five structural variables to student achievement.

The results showed that the climate variable most strongly related to achievement for all samples was students' sense of academic futility. Students' perceptions of academic expectations were highly correlated to achievement for the state sample. When all 14 climate variables were entered into a multiple regression equation, 72.5 percent of the variance in mean achievement between schools in the state sample, 72.8 percent of the between school variance in the black sample, and 44.5 percent of the between school variance in achievement in the white sample was explained. Addition of the composition factors, pupil socioeconomic status and racial composition, to the equation caused only a slight increase in the above percentages. The personnel inputs, combined, were most highly related to mean school achievement in the state and black school samples. Of the structure variables, teacher satisfaction, parental

involvement and teacher instructional time were most highly correlated with achievement. The researchers concluded that a major portion of the variance in mean achievement between public elementary schools in Michigan was explained by characteristics of the school social system identified by three sets of variables (climate variables, personnel inputs and school structure variables).

The Michigan State Department of Education, noticing Brookover's past work, asked Brookover and Lezotte (1979) to study a set of Michigan schools characterized by consistent pupil performance or decline. Since the early seventies the Michigan Department of Education had annually tested all Michigan pupils in public schools in grades four and seven. The tests were criterion referenced standardized measures of pupil performance in basic school skills. Over time these data were used to identify elementary schools characterized by consistent pupil performance improvement or decline. Brookover and Lezotte chose eight of these schools to be studied (six improving, two declining). The schools were visited by trained interviewers who conducted interviews and administered questionaires. The interviews and questionaires were designed to identify differences between the improving and declining schools, and which differences seemed most important to the pupil performance variation between the two sets of schools. The following list provides the most significant and important results:

1. Staff in the improving schools placed a greater emphasis on the accomplishment of basic reading and mathematics objectives than on other curriculum elements.

2. Staff of the improving schools tended to believe that all of their students could master the basic objectives.

3. In contrast to the declining schools, the teachers and principals of the improving schools were more likely to assume responsibility for teaching basic reading and math skills.

4. Staff in the improving schools devoted a much greater amount of time toward achieving reading and math objectives.

5. Principals in the improving schools were more likely to be instructional leaders, more assertive in their institutional leadership role, more discipline oriented, and perhaps most of all, assumed responsibility for the evaluation of the achievement of basic reading and math objectives.

6. Generally, teachers in the improving schools were less satisfied than staff in the declining schools. The higher levels of reported staff satisfaction in declining schools seem to reflect a pattern of complacency and satisfaction with current levels of educational attainment.

8. Differences in the level of parental involvement in the improving and declining schools were not clear cut.

The results of Brookover and Lezotte's research seem to indicate that a school staff's acceptance of the mastery of basic objectives as a fundamental goal is essential to experiencing increased pupil achievement at that school.

Inspired by Brookover's work, Edmonds (1979) set out to identify schools that were instructionally effective for

poor and minority students. Edmonds began the Search for Effective Schools Project with the premise that all children are eminently educable and that the behavior of the school is critical in determining the quality of that education. Edmonds, Lezotte and Ratner (1974) analyzed pupil performance in the elementary schools that made up Detroit's Model Cities Neighborhood. All of the schools were located in inner-city Detroit and served a predominantly poor and minority pupil population. Negating the relationship between pupil family background and building effectiveness, the research team identified two of the schools which differed greatly in mean student achievement but were matched on the basis of 11 social indicators.

The second phase of the Search for Effective Schools Project centered around countering the conclusions of the 1966 Equal Educational Opportunity Survey (EEOS). These researchers found 55 effective schools in the Northeast quadrant of the EEOS. School effectiveness was defined as the ability of a school to eliminate the relationship between successful performance and family background. Pupils in each school were stratified into eight subgroups on the basis of race and social background. Mean scores for each subgroup were computed and used to construct eight separate ranking of the schools, one for each subgroup. On the basis of their research, Edmonds and Fredriksen (1979) concluded that the indispensable characteristics of

instructionally effective schools were (1) strong administrative leadership, (2) a climate of expectation in which no children are permitted to fall below minimum levels of achievement, (3) an orderly atmosphere which was conducive to learning, (4) an emphasis on student acquisition of basic school skills above all other school activities and (5) some means by which pupil progress can be frequently monitored.

Research conducted by Coleman (1981) subsequent to the Equal Educational Opportunity Survey centered on differences between public and private schools. The study concluded that the safer, more disciplined, and more ordered environment of private schools was the single strongest factor accounting for their higher student achievement. Ravitch (1981) argued that this conclusion refutes the original Coleman Study (1966) finding that family background heavily determines educational achievement.

The Principal and Effective Schools. A number of case studies have confirmed Ravitch's contention. Felsenthal (1982) observed an effective, predominantly poor black elementary school in its normal environment. The research results indicated that strong leadership from the principal was the most crucial factor in the school's effectiveness, especially as exhibited in the principal's impact on school climate, expectations, academic standards, and parent-school relations. These findings mirrored conclusions of research

conducted by Venezky and Winfield (1979). The building principal in the more effective of the two urban elementary schools investigated by the researchers was task oriented and committed to raising reading achievement. He was effective in communicating these high reading achievement goals to students and teachers. Further evidence for significant factors contributing to effective schools can be found in the Phi Delta Kappa Case Studies (1980). In the final report, every case study singled out the principal as a critical incident that contributed to progress in student achievement (cited in Educational Research Service, 1983).

Extensive reviews of research studies related to school effectiveness have been conducted with the sole purpose of compiling common characteristics of effective schools. The Educational Research Service (1983; and 1985) examined 26 research reports and concluded that no single formula for school success emerges. Nevertheless, research identified certain common elements that provided a general framework for success. School personnel measures had a greater relationship to student achievement than measures of facilities and supplies. Of these personnel measures, the Educational Research Service (1983) isolates the building principal as the key to providing leadership necessary for increased student outcomes. Squires (1980) reviewed literature on school effectiveness and found that effective schools spent more "time on task" and had a

principal who supported an academic focus. The dominant model in the school is the principal, his or her behavior influences teachers and students. Of the studies examined, student perceptions that the faculty-administration consensus on academic and discipline was fair, firm, and consistent, led to school outcomes which exceeded expectations.

Research indicates that it is rather difficult to calculate the precise amount each school and nonschool factor attributes to learner outcomes. Yet, research has revealed that certain school variables within the control of educators can be manipulated to result in remarkable gains in school outcomes. The principal plays an important role in focusing the thoughts and actions of his or her faculty toward educational excellence. This notion provides impetus for investigations which could prove fruitful in resolving the debate over what factors matter most in effectively educating America's youth.

The next section of this chapter provides an overview of the pertinent literature on the measurement of teacher job satisfaction and the relationship of this variable to school outcomes and other school context factors.

Teacher Job Satisfaction

Work attitudes have been of interest to administrators since the classic Hawthorne studies ushered in the "human

relations" period in management, the 1930s through the 1940s. Mayo (1933) conducted early research which sought to uncover the relationship between physical factors of work (e.g. lighting, rest periods) and worker outcomes. The results indicated that outcomes were a function of the social norms of the informal organization. Consequently, an administrator's ability to relate positively to informal leaders in the organization could result in greater worker outcomes.

In many subsequent studies, researchers continued to analyze the organization rather than the individual. Coughlan (1968) noted that this research (e. g. Baake, 1950; Gardner, 1946; Whyte, 1948) centered on work flow, working conditions, financial rewards, job roles and relationships, hierarchy of power and prestige, job roles and relationships, informal relationships between individuals, and leadership within the organization.

The approach to job satisfaction in several other studies has been to investigate the balance between the role expectations of the institutions and the personality dispositions of the individual. Guba and Getzels (1957) suggest that satisfaction is a function of the degree of agreement between the organizational demands and the needs of the individual. When an individual performs a role required by the organization which also gratifies the individual's needs, the individual is said to be satisfied.

However, when organizational role expectations and the individual's needs do not correspond, dissatisfaction occurs.

Morse (1953) also considered need dispositions while researching four indices of job satisfaction which were (1) job content, (2) identification with the company, (3) financial and job status satisfaction, and (4) pride and group performance. The researcher hypothesized that satisfaction depends on what an individual expects from his work and what he gets. Job satisfaction occurs when the two are in line with each other.

Similarly, Barnes (1960) viewed job satisfaction as being dependent upon satisfaction of basic needs inherent in individual workers. Barnes' formulation is a modification of Maslow's concept of a hierarchy of needs. Maslow (1954) postulates a hierarchy of five needs categories as follows: (1) physiological; (2) safety; (3) belonging and love; (4) ego (self esteem and other-esteem); (5) and self actualization. Maslow proposes that lower level physiological needs must be satisfied before next levels in the hierarchy are satisfied.

Barnes questioned the ordering of needs espoused by Maslow. Consequently, he overlapped safety needs with the higher level needs of "belonging" and "ego". He omitted self-actualization since he felt it was extremely difficult to operationalize. Barnes believed the need for "belonging"

and ego needs, were interdependent and not hierarchially dependent upon the satisfaction of lower needs. Barnes (1960) predicted organizational consequences for the worker's ego (self-esteem and other-esteem) and belonging needs when he states:

> An organizational system helps or hinders an individual to meet his self-esteem needs by the extent of autonomy and freedom it provides on the job. It affects other-esteem by the ways in which influence relationships are structured. It helps to satisfy or to frustrate his belonging needs according to the opportunities for interaction provided beyond those required of the job (p. 169).

Several studies seem to uphold Barnes' hypothesized relations between organizational structures and worker job satisfaction. After gathering information from nearly 1800 teachers, Chase (1951) identified freedom to plan their own work, quality of professional leadership, opportunities for teachers to participate in planning and decision making and salary as important factors for teacher job satisfaction. Argyris (1972) and Schultz (1952) also suggest that employees' perceptions of their supervisors' leadership style and administrative controls can be powerful enough to cause worker dissatisfaction. Likewise, Likert (1967) and Hall (1969) conclude a participative leadership style which maximizes the participation by employees in organizational decision making processes tends to reinforce employee satisfaction.

Satisfaction, Job Performance and School Outcomes. These research conclusions have serious implications for principals' relationship with their faculties. Apparently teachers' decision making authority in the organizational setting of the school is an important factor to consider in in a questionaire study. Hall (1969) revealed that teachers have clear conceptions and expectations about which level of the organization should appropriately be involved in making a variety of decisions. Satisfied teachers reported that they were able to influence decisions in those areas in which they desired to do so. Ellett and Licata (1976) noticed that teachers working directly with principals on school curriculum projects held more positive work attitudes than teachers not working directly with the same principal.

Uncovering the link between worker job satisfaction and worker performance has been of equal interest to researchers as uncovering the organizational variables which are associated with worker morale. Brayfield and Crockett (1955), after an extensive literature review, delivered a hard blow to this notion when they concluded worker morale was fundamentally unrelated to job performance. However, Porter and Lawler (1968) state that early research on job satisfaction tended to be either conceptually naive or too simple in design.

More recent literature reviews and investigations have found positive relationships between work attitudes and job

performance. Vroom (1965) reviewed twenty studies and found that in most instances higher worker satisfaction was related to better job performance. Coughlan and Cooke (1974) maintain that teacher work attitudes and morale are important indicators of job performance and the general "quality" of schooling. Coughlan and Cooke's finding is important because it suggests that teacher work attitudes can be influenced in ways that result in increased learner outcomes.

Coughlan (1966) hypothesized that teachers in "high performance" schools would have more favorable attitudes toward certain work factors than teachers in "low performance" schools. The target population consisted of twenty elementary schools, ten classified as being "high performance" and ten identified as "low performance". Coughlan used the School Survey, an instrument designed to measure teachers' relative satisfaction or dissatisfaction with various dimensions of their school environment. Results indicated that teachers in the high performance schools had more favorable attitudes toward their schools' educational effectiveness, student evaluation practices, community relations, performance and development, and voice in the educational program. Teachers in both groups had similar attitudes toward professional work load, materials and equipment, administrative practices, buildings and facilities, colleague relations and financial incentives.

In later work using another version of the School Survey, Coughlan and Cooke (1974) revealed that schools with the greatest achievement gains perceived their schools as being more educationally effective and themselves as having more constructive supervisory relations with the principal, closer community contact, and greater voice in the educational program than did teachers in schools with the lowest achievement gains. Ellett, Payne, Masters and Pool (1977) also reported significant and substantial partial correlations between teacher scores on various dimensions of the School Survey and the student outcomes measures of student achievement and average daily attendance in a large sample of elementary schools.

Recent studies aimed at uncovering school factors common to schools which are instructionally effective provide mixed findings concerning teacher job satisfaction. Brookover and Lezotte (1979) found greater teacher dissatisfaction in improving schools than declining schools. They suggested that higher levels of reported staff satisfaction in the declining schools seemed to be indicative of a pattern of complacency and satisfaction with current levels of educational attainment. On the other hand, the improving school staff member appeared more likely to be dissatisfied with the existing situation.

Researchers conducting the California School Effectiveness Study (1977) found teachers in higher

achieving schools more satisfied with their work relationships with their principals. High staff morale was also reported in a case study analysis of a high achieving elementary school by the New York State Office of Education Performance Review (1974). Teachers viewed the school as a pleasant place in which to work, believed they could depend on the administrative team for assistance, considered the school well-run, and felt insulated from community and bureaucratic problems (cited in Educational Research Service, 1983).

The Educational Research Service (1983), in an extensive review of effective schools literature, reported that researchers most often perceived higher staff morale among better performing schools. Teachers in these schools seemed more satisfied with their role and more often voiced a preference to continue working in their particular building rather than transfer elsewhere. Austin (1979), summarizing a number of effective schools studies, noted that principals of highly effective schools recognized the unique styles and needs of teachers and helped teachers achieve their own performance goals - a process that may fulfill teachers' higher order needs. Effective principals are skillful at achieving specific student outcomes goals while causing teachers to feel autonomous in their classrooms.

Any comprehensive study of effective schools seemingly can no longer be conducted without including teacher job satisfaction as an integral variable. This variable seems to be significantly influenced by actions taken by principals. This point is made clear by Keeler and Andrews (1963) in describing the results of a major student outcomes study:

> all of the statistics give strong support to the hypothesis that leader behavior of the principal as perceived by his staff was significantly related to the outcomes of the schools. The weight of the evidence supported the hypothesis that the morale of the staff of a school was related to outcomes (p. 190).

Apparently, principals' behavior can have a positive effect on learner outcomes via teacher job satisfaction. Similar findings were echoed in Project ROME - Results Oriented Management in Education (Payne et. al., 1976). Ellett and Walberg (1979) reviewed and synthesized Project ROME findings and reported that in schools where the principal was perceived by teachers as frequently and effectively performing important behaviors, teachers' attitudes toward a variety of work-related dimensions were positive and often showed strong connections with student outcomes.

The next section of this chapter will contain literature concerning factors associated with the ability of principals to influence teachers' instructional strategies and values.

Principal Influence

The ability to influence subordinates in the work environment is a characteristic coveted by many organizational leaders. Acquisition of this quality allows administrators control over intended outcomes of the organization. Administrative theorists have continually sought to understand the attributes of administrative authority that are most useful in influencing workers with job responsibilities requiring differing degrees of task complexity and professionalism.

"Influence" has been described as any behavioral change due to the successful use of authority (Dalton, Barnes, and Zaleznik, 1968). French and Raven (1960) view influence as a psychological change in an individual. Attempting to understand the authority subsumed under the term influence, researchers have described several bases of authority available to organizational leaders. Weber (1947) set the pattern for this type of analysis through his typology of three pure types of legitimate authority: (1) Rational-Legal Authority - arising from a leader's legally appointed position in the organization and his right to issue commands; (2) Traditional Authority - arising from traditional personal loyalty to a ruling family or class; and (3) Charismatic Authority - emanating from devotion to the exceptional sanctity, heroism, and exemplary character of an individual. Weber theorized that rational-legal

authority provided for the highest degree of organizational efficiency.

Dalton et. al. (1968) and Gouldner (1959) reviewed Weber's work and concluded that the elements in his rational-legal authority yielded two independent bases of authority, formal position and recognized professional expertise. The reviewers disagreed with Weber's contention that position-based and knowledge-based authority logically coincided. They noted that it is not logically necessary that someone holding a formal position in an organization should have either superior knowledge or skill as compared to those subject to his orders.

Similarly, Etzioni (1964) argued that there was something fundamentally wrong with Weber's notion of viewing the organization as a hierarchy in which the more rational and competent rule the less competent for two reasons: (1) the more trained members of organizations are found not in the highest ranks but in the middle ranks, and (2) in professional organizations, the basic principles of administrative authority (chain of command, impersonality, rules, etc.) are incompatible to professional or knowledge-based authority. In fact, Blau and Scott (1962) reported that in certain work arrangements the two variables may be inversely related to each other.

Peabody (1962) offered a comprehensive distillation of organizational authority literature. In summarizing the

work of Weber (1947), Urick (1944), Simon (1957), Bennis (1959) and Presthus (1960), Peabody concludes that while all of these social scientists did not place emphasis on the same sources of authority and used different terms to convey similar meanings, several essential points of agreement emerged. He identified four broad categories as follows: (1) authority of legitimacy; (2) authority of position, including the sanctions inherent in position; (3) authority of competence, including both technical skills and experience; and (4)authority of person, including leadership and human relations skills. Peabody further condensed these categories under the two areas of "formal authority", emanating from hierarchial position, and "functional authority" which is based on professional competence, experience and skills. Barnard (1937) referred to these two bases of authority as "authority of position" which is independent of the personal ability of the incumbent and "authority of leadership" which is based on the incumbent's superior knowledge and ability.

Formal position and professional expertise do not complete the list of the bases of authority. A number of other bases of power or authority have been identified in the literature although they lack the clarity of the two abovementioned areas. In an analysis closely related to Weber's bases of legitimate authority, French and Raven (1960) hypothesized that five bases of power (potential

influence) are available to organizational leaders. These are: (1) reward power, based on organizational members' perceptions that the leader has the ability to mediate rewards for them; (2) coercive power, based on members' perceptions that the influence agent has the ability to mediate their punishments; (3) legitimate power, similar to Weber's rational-legal authority, stemming from internalized values which dictate that a power holder has the legitimate right due to position to influence subordinates; (4) referent power, closely akin to Weber's charismatic authority, based upon individuals' identification with their superordinate; and (5) expert power, also related to rational-legal authority, derived from the extent of knowledge or perceived knowledge possessed by the influence agent.

Presthus (1960) provided a slightly different analysis of the bases of authority. He claimed that authority is legitimated through technical expertise, formal position, rapport and a generalized deference to authority which resembles Weber's traditional authority. Legitimation by rapport refers to the interpersonal skills and work climate supervisors maintain. Presthus suggested that the emphasis an administrator places on human relations and the ability to display a warm personality help influence subordinates.

Etzioni (1961) suggested that the exercise of power involves the manipulation of three types of resources:

physical, material, and symbolic. Using the organization rather than the individual leader as the unit of analysis, his compliance theory is a taxonomy derived from merging three types of power and the types of orientations toward that power held by lower participants in the organization. Three congruent or ideal types emerged. Coercive organizations are those in which the physical power is used on lower participants who are predominantly hostile to power holders (e. g. prisons). Utilitarian organizations are those in which renumerative (material) means are used to control calculative subordinates. Finally, normative (symbolic) power is employed to assure the moral commitment of lower participants of normative organizations.

Research in organizational change also provides for an understanding of the modes of influence available to organizational leaders. Chin and Benne (1969) posited three types of strategies leaders employ in their attempts at evoking organizational change. These strategies are based upon their view of their subordinates. In the "empirical-rational" strategy, it is assumed that a worker will adopt a change if it can be rationally justified and shown that the worker will gain by the change. Leaders using the "normative-re-educative" approach will attempt to accomplish change by changing workers attitudes, values, and skills. Finally, the "power-coercive" approach holds that

humans can be influenced to change only because of power differentials.

Kelman (1969) viewed influence from the inside looking out. He noted three processes taking place within the influence recipient. "Compliance" occurs when an individual accepts influence from another person because he hopes to achieve a favorable reaction from the other (e. g. rewards, approval, or punishment avoidance). "Identification" can be said to occur when an individual adopts behavior derived from another person because this behavior is associated with a satisfying, self-defining relationship to this person. "Internalization" occurs when an individual accepts influence because the induced behavior is congruent with the individual's value system and useful for the solution of a problem. Here, the credibility of the influence agent is important.

The sources of administrative influence and the ways in which these sources impact on subordinates have been explored by researchers in several organizational contexts. In an early study involving air force maintenance workers, French and Snyder (1959) hypothesized that the effectiveness of an influence attempt by a leader increases with increasing perception that he/she is an expert in the area of the influence attempt. After analyzing information from questionaires and data from an experiment in which officers attempted to change the opinions of their subordinates, the

investigators found significant correlations existed between the maintenance workers acceptance of their superiors influence and the degree to which they perceived their superiors to be "experts" in that area.

In the late sixties, Bachman, Bowers and Marcus (1968) conducted comparative studies of bases of supervisory power in business, industry and colleges. Using French and Raven's five bases of power, the Bachman studies sought to determine the relative importance of each these bases of power in terms of subordinates' perceptions. Results showed that the two most important reasons subordinates comply with the wishes of their supervisors were legitimate power and expert power. The order of importance of these varied with the organizational context but were ranked first or second in all cases studied. For example, expert power and legitimate power ranked first and second, respectively, among branch-office salesmen for a national firm and semi-skilled workers in a utility company. However, insurance agents and liberal arts college faculty reversed the rank order of these two bases of power. Burke and Wilcox (1971) used a slightly modified but similar methodology with female telephone operators. Their study revealed that expert power and legitimate power ranked first and second, respectively, with this group of subjects (cited in Guditus and Zirkel, 1980).

Similarly, educational researchers have sought to find

what bases of authority or power are most effective in influencing the instructional behaviors of teachers. Trying to discover the administrative attributes necessary to influence teachers, Warren (1968) conducted a detailed study of 528 staff members in 18 public elementary schools using French and Raven's five bases of social power. Warren sought to understand how the utilization of differing power bases by principals affected types and levels of conformity to principals' preferred classroom methods and teaching approaches. Warren used a dichotomy of conformity outlined by Merton (1959) in which "behavioral conformity" refers to compliance in overt behavior but without internalization of norms while with "attitudinal conformity" both the individual's beliefs and values fit with his overt behavior. The impact that varying degrees of observability of the principal has on conformity was also examined. Of all the types of power, coercive power attained the greatest amount of teacher behavioral conformity (change in overt behavior) in schools where the principal was highly visible. However, referent and expert power correlated with the high levels of teacher attitudinal conformity (change in covert behavior) in low visibility environments.

Other research efforts using the French and Raven power base typology have been undertaken in public school settings. Hornstein, Callahan and Benedict (1968), conducted a study involving primary-grade teachers in two

suburban school systems. Correlations between teachers' rankings of the bases of power and other variables (such as satisfaction with the principal's performance) disclosed that expert power and referent power established a consistent, positive relationship with teacher satisfaction. Another elementary study conducted by Balderson (1975) employed a single-choice rather than rank-order approach to finding which power base was associated with teachers' perceptions of principals' performances. Expert power emerged as predominant both in terms of its perceived utilizations by principals as well as its perceived association with satisfaction with the principals' performances (cited in Guditus and Zirkel, 1980).

Guditus and Zirkel (1980) replicated Bachman's methodological procedures in a large scale study involving 683 public school teachers in 64 schools. Teachers were asked to rank, according to their importance, five statements reflecting reasons for doing what the principal asks or suggests. Each statement represented one of French and Raven's five bases of social power. Teachers ranked legitimate power as the number one reason they accede to the wishes of the principal. Referent power and expert power attained the largest positive relationships with teacher satisfaction with the principal's performance ($r=.76$ and $r=.72$ respectively). Although Guditus and Zirkel suggest the erosion of principals' legitimate power reported by

other writers (Sergiovanni and Starrat, 1971) is more imagined than real, they report that:

> the influence of principals depends to a considerable degree on their possession of special knowledge and skills which enable them to help teachers achieve their goals. This conclusion is reflected in the consistently high ranking of expert power and its significant direct relationship to teacher satisfaction with the principal's performance. It indicates one way in which principals can offset the erosion in their legitimate power. The preparation, selection, in-service training, and evaluation of school principals should be modified to enhance the expertise base of their supervisory power (p. 3).

Sergiovanni (1983) agreed with these findings when he noted that the technical structure of the educational system in America has become more complex and diversified. Teachers by virtue of competence and person authority are assuming more responsibility in the overall implementation of the educational program in their schools. This increase in educational sophistication has required administrative arrangements beyond the traditional definition of principals' roles wherein the principal must exhibit additional skills and competencies.

Lortie (1969) offered a detailed analysis of the balance of control in elementary schools. He suggests that self-contained classrooms are small universes of control with the teacher in command. Quite often, the "closed door" is an impediment to administrative surveillance. Additionally, since the key rewards of teaching (student approval, prestige, self-esteem) are largely independent of administrative action, the teacher's relationship to

administrative superiors can move away from subordination toward exchange in which they select and implement curricula and techniques which hold meaning for them. Furthermore, Etzioni (1964) suggested that teacher tend to adopt the full-fledged professions (doctors, lawyers, etc.) as their reference group in the sense that they view themselves as professionals and feel that they should be given more discretion and be less controlled. Therefore, principals must attempt to influence teachers by exhibiting success in areas which are closely related to teachers' tasks. Taking an assertive role in the instructional program on district and school levels, principals send a strong message to teachers that they can share reliable advice in instructional matters. Schools that perform in unusually effective ways have principals who exhibit this characteristic. Ellett and Walberg (1979) synthesized Project ROME (Payne, et. al. 1975) findings and concluded teachers' perceptions of the performance of their principals in a number of competencies correlated rather highly with selected indices of teacher attitudes toward the work environment, which in turn, were strongly linked to student achievement and attendance.

School Outcomes

In recent years, society has placed a great deal of emphasis on investigating the outcomes of our nation's

schools. Concerned with declining student outcomes and America's relative standing with student performance in other countries, parents and public officials have called for greater teacher accountability and improved student test results (Tunney,1984). Foremost among recent research concerning school outcomes was an undertaking by the National Commission on Excellence in Education. Their 1983 report entitled "A Nation at Risk: The Imperative for Educational Reform" told of an educational foundation which was being eroded by a "rising tide of mediocrity". The research results showed declining average achievement in nearly all areas of student learning. This alarmed many educators and sent them scurrying "back to the basics" -increased math, reading, classroom time, homework - suggested by the commission. Assessment results from another federally funded research organization, National Assessment of Educational Progress (NAEP), were somewhat similar. The 1982 NAEP report on national trends in reading, science and mathematics achievement disclosed overall gains in reading performance for young students but losses in mathematics and science performance for older youth. Consequently, school outcomes has been a keen concern of parents, legislators, and educators.

This concern for school outcomes has significantly impacted on educational policy formation. Governmental bodies have allocated vast amounts of human and monetary

resources to aid schools with low outcomes.

Student achievement on standardized tests has been the primary school outcomes measure used in national assessments of student learning. The extreme amount of emphasis placed on student achievement as the sole indicator of school effectiveness has caused skepticism among some writers. Walberg (1978) noted that although academic accomplishment is an important aspect of human quality it is by no means the only one. He suggested that other production goals (e. g. students' perceptions of their social environment for learning and classroom experiences) should be equally coveted. These indicators of test scores and goals in their own right could be sacrificed in the race to attain the greatest scholastic achievement goals in the quickest and most cost-efficient ways.

Tunney (1984), concurred with Walberg's assessment and suggested that the school's primary goal was to build strong, self-reliant, self-educating young people. He concluded that the "back to basics" move would be futile without the inclusion of two powerful factors, self-esteem and participation, as production goals. He wrote that:

> it is a well-supported finding that people learn faster, achieve more, and rate their achievement more honestly is they feel good about themselves and if they enjoy the process of learning.
>
> Teaching to build SAT scores alone will not teach the intangibles, like being honest or having a sense of civic duty. Our educational system would collapse without consistent effort in those areas. Improved SAT scores will mean little if they are not developed in the midst of a realistic sense of participation and

> focus on strengthening self-esteem of both students and teachers (p. 120).

Researchers have found yet another indicator of school effectiveness, student absenteeism. Collecting data on 227 students over two years, Monk and Ibrahim (1984) sought to compare pupil absentee patterns and gross quantities of absence with pupil test performance. Results indicated that patterns of absence, in addition to gross quantity of absence, are related to student achievement through their effect on the amount of classroom instructional time. Moreover, results also indicated that attending students' test scores were sensitive to their classmates absences. The researchers went on to suggest that student absenteeism not only caused lowered student achievement and school outcomes but could also be considered a consequence of the activities taking place in the school. Absenteeism becomes an indicator of the schools' total "holding power". Since financial support for public school is quite often determined by student average daily attendance (ADA), Payne et. al. (1975) suggested that it is reasonable to assume that ADA figures reflect the global quality of the total school program, other factors held constant. Ellett, Payne, Masters and Pool (1977) found student ADA to be a viable school outcome measure predictable from teachers' work attitudes. In a recent study of schools in Louisiana,

Morris (1986) showed strong, positive correlations between pupil achievement, attendance and teachers' positive perceptions of school climate. Given this line of reasoning, student ADA figures might be considered as a valid outcome variable to which other variables can be related.

Recent studies has viewed student outcomes as a consequence of certain school context variables manipulable by school personnel. This body of research, referred to as the effective schools research, isolates the principal as the key person for improving school outcomes (Robinson, 1985). Principals' actions can affect the job performance of other school personnel in ways which can improve or hinder educational attainment. Teachers' perceptions of their principals' job performance have been shown to be related to teachers' job satisfaction and teachers' willingness to accept influence attempts from principals (Payne et. al., 1975; Guditus and Zirkel, 1980). The latter two teacher variables have also been shown to be related to teachers' classroom behaviors and performances (Coughlan and Cooke, 1974; Warren, 1968). Despite these facts, a research void exists for testing a model in which these context variables interrelate and concomitantly impact student outcomes. This study tests this complex conceptual framework. The following chapter details the methodology and procedures.

CHAPTER III

METHODOLOGY AND PROCEDURES

This chapter describes the research design, instrumentation, and data collection and analysis procedures used in testing hypotheses of the study.

Research Design

The design of the study meets the qualifications an ex post facto design in which variables are assigned rather than manipulated (Campbell and Stanley, 1966). For the purposes of this study, teacher satisfaction, principal influence, and teacher perceptions of principal effectiveness were conceptualized as independent variables. Dependent variables were school mean achievement and school average daily attendance.

Sample

The sample for this study consisted of 1,144 teachers in 61 public elementary schools in three large school districts in the state of Louisiana. Due to the characteristic presence of single administrators in elementary schools, teachers from these schools were exclusively chosen for inclusion in the sample. The division of administrative responsibilities among multiple

administrators (principals and assistant principals) in middle and high schools confounds teachers' perceptions of principal performance.

Instrumentation - Independent Variables

The general purpose of this study was to examine the relationship between teachers' perceptions of principals' influence, principals' instructional leadership and teacher job satisfaction and the combined effects of these variables on school attendance and achievement. An adaptation of Kunz's Professional Zone of Acceptance Inventory (PZAI), the Principal Performance Description Survey (PPDS) - Teacher Form and a shortened form of Johnson's Job Satisfaction Scale (JSS) were used as measures of the independent variables. Discussion of the historical development, structure and psychometric properties of each of these instruments follows.

Professional Zone of Acceptance Inventory (PZAI): Development and Structure

The Professional Zone of Acceptance Inventory (PZAI) was developed through the doctoral work of Daniel W. Kunz (1973) at Rutgers University. The instrument was designed to measure teachers' likelihood of complying with unilateral decisions made by their principals. The original form of the PZAI consists of 30 items that describe areas in which principals make certain policy decisions. The areas are:

selection of instructional materials, methods of classroom discipline, change and modification of curricula, evaluation of student progress, rules governing desirable methods to be used in the classrooms, methods to be used for parental conferences, determination of in-service requirements, program evaluation and determination of classroom time allotments. Five possible responses -- Never, Seldom, Occasionally, Often, Always -- accompany each item. Teachers choose a scale point to indicate their likelihood of complying with their principal's decision relative to the item. The average time required to complete the instrument is five minutes. For the purposes of this study, the response format of the PZAI was changed. In responding to PZAI items, teachers were asked to choose scale points to indicate the likelihood that their principals' recommendations would influence their behaviors. This revision was made to allow measurement of teachers' willful acceptance of influence as opposed to their compliance to principals' directives out of duty or fear of negative sanctions.

Kunz (1973) analyzed results from a study involving teachers (n=380) in 50 secondary schools and constructed a 15-item form. This shortened form was later used in a study of teachers (n=321) from 42 elementary schools. This shortened form, used in the study, can be found in Appendix A. The decision to use this form was based on the following

reasons: (1) The shorter version of the PZAI would require less time for respondents to complete the instrument, and (2) Kunz (1973) correlated the shortened PZAI with the original 30-item PZAI from which it was extracted and reported a correlation (r) of .97.

Validity. Evidence for the construct validity of the PZAI was established by Kunz (1973) in a study of elementary and secondary teachers. The factor structure of the PZAI supports the notion that the instrument measures one primary factor - likelihood of compliance (Kunz, 1973). A one-factor solution using principal components analysis of PZAI data accounted for 72 percent of the total variance of scores for the 30-item version of the PZAI. The first factor in a similar analysis of the 15-item PZAI accounted for 92 and 93 percent of the total instrument variance, respectively.

Reliability. Reliability of the the PZAI was established by Kunz (1973) during a pilot study of the instrument (Kunz, 1973). Fifty four secondary school teachers completed identical forms (30-item version) of the PZAI in two administrations. Test-retest stability over a one week period was .91. Subsequent analyses of results from 380 secondary school teachers showed that the 15-item PZAI form was highly correlated (r= 0.97) with the original 30-item PZAI form.

Principal Performance Description Survey (PPDS) - Teacher Form: Development and Structure

The Principal Performance Description Survey (PPDS) - Teacher Form (Payne et. al., 1976) was used in this study to measure teacher perceptions of the effectiveness with which principals perform selected instructional leadership behaviors. The PPDS was developed through Project ROME - Results Oriented Management in Education, a Title III funded research effort aimed at building a competency-based assessment system for school principals, at the University of Georgia, College of Education. The PPDS - Teacher Form consists of 64 items that reference a variety of principal behaviors that relate to the principal's functioning as an instructional leader. These items are classified by four functional areas of administrative responsibility: (1) Curriculum and Instruction, (2) Staff Personnel, (3) Pupil Personnel, and (4) System Wide Policies and Operations.

The structure of the PPDS - Teacher Form instrument allows a teacher to make two responses concerning principal behavior: (1) the "frequency" with which the principal performs a given behavior; and (2) the "effectiveness" with which the principal performs a given behavior. Frequency responses range from 1-never to 5-very often. Effectiveness responses range from 1-ineffective to 5-very effective.

For the purposes of this study, the PPDS - Teacher Form was somewhat shortened by using 49 Curriculum and

Instruction and Staff Personnel items and three Pupil Personnel items. Additionally, two items identified by Project ROME for measuring parental involvement in schools were included in the modified PPDS - Teacher Form. These two items were part of the original item field test pool but were not included in the final 64-item PPDS - Teacher Form instrument. The PPDS was reduced in length for the following reasons: (1) to shorten the instrument administration time, and (2) to construct an instrument more consistent with instructional leadership qualities of effective principals documented in syntheses of research studies on effective schools. The response format of the PPDS was also changed to 1-"Ineffective", 2-"Somewhat Effective", 3-"Effective" and 4-"Highly Effective" because previous studies of the instrument demonstrated strong positive correlations between teachers' responses to the "frequency" and "effectiveness" scales (Payne, et.al., 1975). The shortened form used in this study can be found in Appendix B.

Validity. An initial pool of 885 items was generated through Project ROME for various forms of the PPDS. Items were generated through reviews of the professional literature related to principal competencies, direct observations of principals' on-the-job performances, statewide surveys, and objectives-based workshops with principals (Payne, et. al., 1975). A statewide verification

survey involving 290 principals in Georgia was used to reduce the original 885 competencies to 338 performance statements rated as "essential" for the effective operation of a school by 50% of the principals in the sample and "essential" or "highly desirable" for the effective operation of a school by 90% of the principals in the sample. Subsequent field testing and research reduced the instrument to 64 items appropriate for assessment by teachers as a group (Payne et. al., 1975). Each of these items has been linked to a measure of multiple dimensions of the work environment as viewed by teachers which, in turn, showed strong relationships to school attendance and achievement (Ellett and Walberg, 1979).

Reliability. Payne et. al. (1976) established reliabilities for the PPDS - Teacher Form as part of an investigation involving 42 elementary schools in Georgia. Reliability estimates (Cronbach's coefficient Alpha) for the 11 dimensions (competency categories) of the PPDS - Teacher Form ranged from a low of .45 to a high of .99 for Frequency ratings, and from .30 to .99 for Effectiveness ratings within the 42 schools in the sample. The median reliability for each of the 11 instrument dimensions ranged from a low of .84 (Planning) to a high of .98 (Communicating) for Frequency ratings, and from .83 (Planning) to .98 (Communicating) for the Effectiveness ratings. Cross (1982) established a test-retest coefficient for the PPDS - Teacher

Form of .92 for Frequency ratings and .90 for Effectiveness ratings.

Job Satisfaction Scale (JSS): Development and Structure

The Job Satisfaction Scale (JSS), developed by Johnson (1955), measures the opinions of teachers across a variety of areas related to job satisfaction. The questionaire consists of 99 items to be answered on a "yes" or "no" basis with a "?" category reserved for items which do not apply to the respondent. The following work dimensions are included in the JSS questionaire: Physical and Mental Exertion; Physical Surroundings and Working Conditions; Relations With Employers; Relations With Other Employees; Advancement, Security and Finances; Interest in, Liking for, and Emotional Involvement in the Job; Job Status and Job Information; Future Goals and Progress Toward Goals; and Evaluation in Retrospect. The instrument was developed by reviewing the context of existing job satisfactions scales, research literature on job satisfaction and through logical analysis. Administration time of the complete JSS ranges from 45 to 60 minutes.

In this study, a shortened JSS form was used. Items were examined for their relevance to teachers' school work dimensions by a panel of experienced educators. Items which had no apparent face validity were deleted to acquire an instrument better suited for the investigation at hand.

This procedure resulted in an 82-item form of the JSS used in this study. The JSS form is included in Appendix C.

Validity. Initially, Johnson (1955) asked 1,184 teachers to rate each JSS item on its importance to job satisfaction. During later research, he found that an 11 point scale (administered during a reliability study) with "1" representing complete dissatisfaction, "6" average satisfaction and "11" complete satisfaction correlated .64 with scores on the questionaire. Johnson also conducted paired comparison ratings of 18 teachers by each other on the dimension of job satisfaction. The ratings correlated .61 with scores on the questionaire (Johnson, 1955).

More recently, Morris (1986) conducted an extensive examination of the factor structure of the JSS with a reduced form of 72 items. A three-factor solution best identified the constructs measured by the JSS. Morris (1986) termed the three constructs measured by the instrument as: (1) Perceptions of the Job; (2) Perceptions of Fellow Employees/Colleagues; and (3) Perceptions of Financial Incentives.

Reliability. Johnson (1955) reported a test-retest reliability of .98 over a three week period for the JSS using a sample of 98 teachers. The average bi-serial correlation between total score and work category is .45. Internal consistency indices (point biserial correlations) ranged from a high of .75 to a low of .05.

In a more recent investigation of the JSS, Morris (1986) reported reliability coefficients for a three-factor version. Alpha reliability estimates of 0.92, 0.83 and 0.74 were found for the job dimensions entitled Perceptions of the Job, Perceptions of Fellow Employees/Colleagues, and Perceptions of Financial Incentives, respectively.

Average Daily Attendance and Achievement Data - Dependent Variables

Average daily attendance (ADA) data were collected for each school in the study. ADA figures were computed as a percentage of total possible attendance for the 1985-86 school term.

Results by grade level from the 1985-86 administration of the verbal and quantitative portions of the Science Research Associates Achievement Series (SRA) (Science Research Associates, 1978), were obtained from the test publishers for all sixty one schools in the study. School means were computed by averaging SRA national percentile ranks across grade levels for SRA reading, mathematics subtests and for the SRA composite score. It should be noted that percentile rank scores do not represent equally appearing intervals on a score distribution. However, since percentile scores for individual students were not used to compute school mean scores, the school mean percentile ranks represent the correct ordering of school achievement among schools in this sample. When used in subsequent analyses,

these school mean percentile ranks generally meet the requirements and assumptions of the statistical tests employed.

Data Collection Procedures

To reduce the workload for respondents and to maximize the response rate of the three instruments used in the study, a "mixed matrix" data collection procedure was employed. Each teacher in the sample was randomly assigned one of following three instrument packages:

Set A--> Principal Performance Description Survey - Teacher Form and Job Satisfaction Scale

Set B--> Job Satisfaction Scale and Professional Zone of Acceptance Inventory

Set C--> Principal Performance Description Survey - Teacher Form and Professional Zone of Acceptance Inventory

This procedure enabled two-thirds of all participants in each sample school to respond to any one of the three instruments. This procedure somewhat reduced the available data for within school variation. However, it made the data collection procedure less time intensive for teachers.

Demographic data such as teacher ethnicity, degree level and experience were also collected to document characteristics of the subjects in the sample. In addition, pertinent school demographic data such as school size and school socioeconomic status was collected. A socioeconomic index was developed for each school from the percentage of

students in the school receiving free or reduced cost lunches.

Survey distribution methods varied for the three participating school districts (hereafter referred to as districts A, B, and C) involved in the study. In district A, principals were asked to distribute surveys to all regular classroom teachers. Teachers were asked to complete the surveys and return them to their school librarians for forwarding. In district B, central office personnel distributed surveys to all participating teachers and collected the completed surveys. In district C, each teacher selected for the study was mailed a survey along with a self-addressed stamped envelope for return purposes. In an effort to obtain a greater survey return rate, follow-up letters were sent or telephone calls were made directly to key individuals in all three district who encouraged teacher participants to complete their instrument packages. In all three districts, teachers were asked to return their completed questionaires to the designated individual within a two-week period.

Data Analysis Procedures

Descriptive Statistical Summaries

Descriptive statistical summaries independent variables, dependent variables and demographic variables were computed. School means and standard deviations were

computed for each variable.

Analyses of the Instrumentation

Preliminary analyses were conducted to examine the psychometric properties (alpha reliability and item statistics) of the three instruments used in the study. A factor analysis of data collected with the Professional Zone of Acceptance Inventory (PZAI) was undertaken in order to verify Kunz's (1973) original findings. First, an inter-item correlation matrix was created. This procedure was followed by the generation of a factor pattern and factor structure matrix using oblique rotation procedures and an unconstrained solution. Results from this analysis suggested that a one-factor solution using an identical rotation method was warranted. An alpha reliability coefficient was then calculated for the one-factor version of the PZAI.

An inter-item correlation matrix was also produced for Principal Performance Description Survey - Teacher Form (PPDS) items. To examine the structure of the PPDS - Teacher Form, a factor analysis involving four steps was completed as follows: (1) PPDS means across all surveys were calculated and substituted for missing survey item values; (2) an unconstrained, oblique solution was completed; (3) a three-factor solution was completed using oblique rotation procedures; and (4) a one-factor solution was completed

using an oblique rotation procedure. An alpha reliability coefficient was calculated for the one-factor version of the PPDS.

Analysis of the psychometric properties of the Job Satisfaction Scale (JSS) also began with the creation of an inter-item correlation matrix and an unconstrained, oblique solution. These procedures were followed by completion of three-factor and one-factor solutions.

It might be recalled that the original JSS form was shortened from 99 items to the 82-item JSS form used in this study. A similar shortened JSS form was factor analyzed by Morris (1986) using data from over 500 teachers. Morris' results identified three JSS factors. Due to the robustness of Morris' JSS database, the decision was made to aggregate items on the JSS form used in this study according to the three-factor structure she reported. This procedure resulted in the reduction of the number of JSS items from 82 to 55. The 55 items retained for subsequent analyses were measures of Morris' three factors which were termed: (1) Perception of the Job; (2) Perceptions of Fellow Employees/Colleagues; and (3) Perceptions of Financial Incentives.

Testing of the Research Hypotheses

Analysis pertinent to the testing of the research hypothesis were completed using school means as the units of

analysis. Pearson Product Moment Correlation Coefficients were computed to examine relationships between independent and dependent variables. Multiple regression analyses were conducted regressing achievement and student average daily attendance (school outcomes) on total scores and subscale scores of the three instruments.

Correlational Analyses

Pearson Product Moment Correlation Coefficients were computed to examine relations between items on instruments used in this study and relations between independent variables. Correlations between items within the instruments were computed to construct inter-item correlation matrices used as initial steps in the factor analyses of each instrument.

Supplemental Analyses

A variety of supplemental analyses of the data collected in this study was completed. These analyses, while not pertinent to the research hypotheses, were completed as additional "probes" of the data. These analyses served to answer a variety of subsequent questions useful in explaining results of the study.

CHAPTER IV

RESULTS

Major results of the study are described in five sections. First, descriptive statistics for the sample will be presented. These are followed by results from analyses of the instruments used to measure the independent variables. Factor analyses and alpha reliabilities for the instruments are discussed. The next section contains statistics relative to the dependent variables (student achievement and attendance) in the study. The fourth section will contain a discussion of results of tests of the research hypotheses. The final section contains an explanation of supplemental analyses, tangential to the research hypotheses, which were undertaken.

Descriptive Statistics of the Sample

The sample for the study consisted of 61 public schools from three large districts in the state of Louisiana. Surveys were administered to 1,144 teachers who were asked to complete them on a voluntary basis. Teachers were given two weeks to complete and return the surveys.

Teachers within schools were randomly administered one of three different instrument sets. Each instrument set consisted of two instruments in the following combinations:

Set A--> Principal Performance Description Survey and Job Satisfaction Scale

Set B--> Job Satisfaction Scale and Professional Zone of Acceptance Inventory

Set C--> Principal Performance Description Survey and Professional Zone of Acceptance Inventory

Fourteen schools from the original sample were eliminated from subsequent analyses because of low return rates. Participating schools and their respective teaching staff sizes and survey return rates are shown in Table 14, Appendix D. Descriptive statistics for each participating school system and the distribution of participating schools can be found in Table 1. As indicated in Table 1, the largest proportion of participating schools and teachers came from school district A.

Useable surveys were obtained from a total of 506 teachers. Table 2 presents summary data for the total number of responses to each instrument set and the total number of individual instruments contained therein.

TABLE 1

Summary Statistics for the Three Participating School Districts, Distribution of Participants and Return Rates

	Initial Sample		Useable Returns	
District	Schools	Teachers	Schools	Teachers
A	20	377	18	214 (57)
B	20	331	15	164 (50)
C	21	436	14	128 (29)
TOTALS	61	1144	47	506 (44)

Note. Numbers in parentheses represent corresponding percentages of useable returns.

TABLE 2

Summary Statistics for Total Number of Completed Instrument Sets and Total Number of Completed Individual Instruments

Set	Number of Forms	Number of Instruments		
		JSS	PPDS	PZAI
A	179	179	---	179
B	161	---	161	161
C	166	166	166	---
TOTALS	506	345	327	340

Summary statistics for selected demographic characteristics of all participants are provided in Table 3. Table 4 presents means and standard deviations of work experience data for the total sample of teachers in the study.

Descriptive Statistics for Instruments Used to Measure the Independent Variables

Data for three instrument sets used to measure the independent variables under investigation were completed by 506 teachers. Teacher job satisfaction, teacher perceptions of their principals' instructional leadership behavior and the degree to which principals are able to influence teachers' instruction-related behaviors served as independent variables. The Job Satisfaction Scale (JSS) was used to gather data concerning teacher job satisfaction. The Principal Performance Description Survey (PPDS) - Teacher Form served as the principal instructional leadership measure. The ability of principals to influence their teachers' instruction-related behaviors was measured by the Professional Zone of Acceptance Inventory (PZAI).

Professional Zone of Acceptance Inventory

The Professional Zone of Acceptance Inventory (PZAI), used to gather data concerning teachers' ability to be

TABLE 3

Demographic Characteristics of Total Number of Respondents (n=506)

Sex		Degree	
Male	31 (6.2)	Bachelor's	316 (67.4)
Female	466 (93.8)	Master's	105 (22.4)
Missing	9	Master's+ 30	40 (8.5)
		Specialist	8 (1.7)
		Missing	37

Ethnicity		Grade	
White	362 (74.3)	K	62 (13.2)
Black	121 (24.8)	1	82 (17.5)
Hispanic	3 (0.6)	2	75 (16.0)
Amer. Indian	1 (0.2)	3	83 (17.7)
Missing	19	4	78 (16.6)
		5	48 (10.2)
		6	28 (6.0)
		7	7 (1.7)
		8	3 (0.6)
		9	2 (0.4)
		Missing	37

Note. Numbers in parentheses represent corresponding percentages.

TABLE 4

Summary of Means and Standard Deviations for Selected Work Experience Data for Total Number of Respondents (n=506)

Variable	$\bar{X}$	S. D.
Number of Years Teaching Experience	13.49	8.74
Number of Years Teaching Experience in Current District	11.36	8.92
Number of Students in Classes	25.47	5.34
Number of Students in Classes Receiving Free/Reduced Cost Lunches	13.72	5.72
Number of Schools in Which Employed in Current District	1.87	2.11
Number of Years Teaching Experience Under Current Principal	5.61	5.90

influenced by their principals, was completed by 340 teachers. The instrument consisted of 15 professional responsibilities of teachers in which teacher discretion could be exercised. Teachers indicated the likelihood of their conforming to the their principal's preference in each area of responsibility. Five responses could be made as follows: 1=Never, 2=Seldom, 3=Occasionally, 4=Often, and 5=Always. The grand mean item rating for respondents on the PZAI was 3.86. Table 15 in Appendix E presents the means and standard deviation for each item. Table 5 provides a PZAI total instrument mean and standard deviation for the sample. PZAI school means ranged from 50.2 to 62.3 with 54.5 being typical of the sample. The total instrument mean was 57.68 representing 76.9 percent of the total possible instrument score. This result suggests that participants were, on the average, inclined to accept professional suggestions from their principals.

An inter-item correlation matrix for the PZAI was generated. Mean item estimates were substituted for missing item values. This procedure was undertaken to structure a PZAI data set sufficiently large enough for subsequent factor analyses. Pearson correlation coefficients among PZAI items ranged from .82 to .43, with correlation coefficients approximating .60 being most typical. These

TABLE 5

Mean Total Score and Standard Deviations for Teachers on the PPDS, PZAI, the Total JSS and the Three JSS Factors

Measure	n	$\bar{X}$	S.D.
PZAI	340	57.68 (76.9)	4.95
PPDS	327	165.96 (76.8)	24.42
JSS (82-item form)	345	55.71 (67.9)	6.24
JSS Factor I		23.19 (70.3)	3.31
JSS Factor II		12.34 (82.3)	1.15
JSS Factor III		2.93 (41.9)	0.86

Note. Numbers in parentheses represent mean scores expressed as percentages of the maximum possible score.

results suggested that the PZAI items varied somewhat in their independence from one another.

Principal Performance Description Survey - Teacher Form

The Principal Performance Description Survey (PPDS) - Teacher Form used in this study contained 54 items related to various principal leadership behaviors. Teachers assessed their principal's effectiveness on each PPDS item by assigning one of four numerical values: 1="Ineffective", 2="Somewhat Effective", 3="Effective", and 4="Highly Effective". The grand mean item score for respondents on the PPDS - Teacher Form was 3.08. Individual item means and standard deviations are provided in Table 16, Appendix E. Table 5 provides PPDS - Teacher Form total instrument means and standard deviation for the sample. PPDS - Teacher Form school means ranged from 133.5 to 201.8 with a score of 163 being the most typical score. The total instrument mean was 165.96 representing 76.8 percent of the maximum possible PPDS - Teacher Form score. This result suggests that participants, on the average, perceived their principals to be effective in performing certain job responsibilities.

An inter-item correlation matrix for the PPDS - Teacher Form was generated. In this analysis, item means were substituted for missing values. This procedure was undertaken to allow for the inclusion of a larger number of

cases in subsequent factor analyses. Pearson correlation coefficients ranged from a high of .82 to a low of .30 with .56 most typical. These results suggested that the PPDS - Teacher Form items varied considerably in their independence from one another.

Job Satisfaction Scale

The Job Satisfaction Scale (JSS) form administered to teachers in the study consisted of 82 items. Useable returns were obtained from 345 teachers. The JSS response format allowed for a "yes" or "no" response to questions concerning teachers' attitudes toward various dimensions of the job. JSS item response frequencies for the total sample of teachers can be found in Table 17, Appendix E. A score of "1" was assigned to a "yes" response while "0" was assigned to a "no" response. Table 5 presents JSS total instrument and subscale means and standard deviations for the sample. The three JSS factors (subscales), as identified by Morris (1986) will be discussed more fully in the next section. JSS school means ranged from 45.6 to 69.4 with 60 being the most typical score. The total JSS instrument mean was 55.71 representing 67.9 percent of the maximum score. This result suggests that participants in the sample had somewhat favorable attitudes toward their work environment.

An inter-item correlation matrix was generated for the

JSS. Pearson correlation coefficients in the matrix ranged from 0 to .50 with .30 being most typical. These results suggested moderate variation in the degree of independence among the JSS items.

Descriptive Statistics for the Dependent Variables

School Achievement

Mean national percentile ranks for reading, mathematics and composite scores were computed for the 47 schools in the sample using grade level percentile ranks on the 1985-86 administration of Forms One and Two of the Science Research Associates Achievement Series (SRA) (1978). School mean reading, mathematics and composite percentile ranks served as the units of analysis in examining relationships with the independent variables studied. Mean national percentile SRA reading, mathematics and composite ranks are presented for each school in Table 18, Appendix F. SRA reading national percentile ranks ranged from 19.3 to 70 with 38 being most typical. National mathematics ranks ranged from 31.2 to 74.5 with 55 most typical. Composite SRA national percentile ranks for the sample ranged from 17.2 to 75.6 with 51 being most typical. Grand mean SRA reading, mathematics and composite national percentile ranks and standard deviations are reported in Table 6.

TABLE 6

Grand Means and Standard Deviations for Sample on Science Research Associates Achievement Series (SRA)

Test Subscale	Grand Mean	Standard Deviation
Reading	42.27	12.50
Mathematics	51.58	12.31
Composite	45.42	16.53

Note. Grand means presented in table represent total average national percentile ranks for sample in respective subtest areas.

Attendance

Student average daily attendance was computed for all 47 schools in the study using attendance data from 1985-86 school district records. Average attendance figures were based on a 180-day school year. Average daily attendance data for each school in the sample are reported in Table 19, Appendix G. Average daily attendance scores ranged from 93 to 97.3 percent with the 96 percent most typical. A grand mean average daily attendance of 95.73 and standard deviation of 0.95 is also reported for the 47 schools in Table 19, Appendix G.

Results of Instrument Factor Analyses

Professional Zone of Acceptance Inventory (PZAI)

Although Kunz (1973) investigated the factor structure of the PZAI during development of the instrument, a similar analysis was completed in this study in an attempt to replicate his findings. Factor analysis of the PZAI began with the generation of a inter-item correlation matrix. Correlations ranged from .82 to .43 with .60 typifying the matrix. These results suggested that the PZAI items were highly to moderately dependent.

Examination of the correlation matrix suggested that an unconstrained oblique factor analysis with unity (1.0) in the diagonal should be completed. Two major factors were

identified from this analysis. Examination of the factor structure showed that item loadings for Factor II were rather low. The total variance explained by Factor II was 1.02 compared to 9.13 for Factor I. These findings suggested that one strong factor is measured by the PZAI item set.

A one-factor solution was subsequently performed on the PZAI data set. Factor loadings for the PZAI items ranged from .64 to .84 with most factor loadings falling between .74 and .79. The total variance explained by the one-factor solution was 9.14. These results suggest that the PZAI is best considered a single factor instrument. This factor defines a construct that depicts the frequency with which teachers are willing to be influenced by their principals' professional recommendations. Factor loadings for the one and two-factor solutions for the PZAI can be found in Table 20 in Appendix H.

Principal Performance Description Survey (PPDS) - Teacher Form

In order to determine the relative independence of PPDS items, a PPDS item intercorrelation matrix was created substituting mean item scores for missing data. The correlations ranged from .82 to .30 with .56 most typical. These results suggested that the PPDS - Teacher Form items were relatively dependent.

In order to allow for some item dependence in the

subsequent factor analyses, the decision was made to use an unconstrained oblique solution with unity (1.0) in the diagonal. This procedure extracted six factors. Examination of the factor pattern matrix identified three meaningful factors.

These results suggested that a three factor oblique solution with unity in the diagonal should be completed. Table 21 in Appendix H contains factor structure loadings (correlation coefficients) for each PPDS - Teacher Form items for each of the three factors derived from the solution. The percentage of variance accounted for by the three-factor solution for the three factors were 31.00, 2.1 and 1.73, respectively. These results suggested that a one-factor solution for the PPDS - Teacher Form should be completed.

Table 22 in Appendix H contains factor loadings for the one-factor solution for the PPDS - Teacher Form. PPDS - Teacher Form loadings (pattern coefficients) varied from .83 to .61 with loadings between .70 and .79 most typical. These results suggested that the PPDS - Teacher Form instrument used in this study measures one strong factor and that all items should be retained for subsequent analysis of the independent variables investigated in this study. This factor appears to be a global measure of teachers' perceptions of the effectiveness of principals' job-related performance.

Job Satisfaction Scale (JSS)

An intercorrelation matrix of JSS items was computed for the total sample of teachers. Inter-item correlations varied from 0.00 to .50 with .25 most typical. These results suggested that JSS items were relatively independent; thus, an unconstrained factor analysis solution with orthogonal rotation and unity (1.0) in the diagonal was completed. Examination of the factor pattern matrix identified three meaningful factors. This procedure was followed by a three-factor solution with orthogonal rotation. Results of the three-factor solution are shown in Table 23 in Appendix H. The percentages of variance explained by JSS Factor I, II and III were 10.98, 6.77, and 3.83, respectively. Factor loadings for JSS Factor I ranged from .68 to -.07 with .56 most typical. JSS Factor loadings ranged from .64 to -.14 with .22 most typical. Factor loading for JSS Factor ranged from .61 to -.25 with .14 most typical.

A concurrent investigation of the structure of the JSS by Morris (1986) with a sample of 579 teachers in a large Louisiana school district was in process at the same time as the study reported here. Therefore, it was of interest to do a comparative analysis of the factor structure of the JSS for this sample and Morris' (1986) sample.

The results of the three-factor solution completed in this study were highly similar to the findings in Morris'

(1986) study even though a few items were not in common in the two analyses. Additionally, Morris' (1986) study utilized a three-response format ("yes", "no" or "?", reserved for sometimes) while analyses in this study were based on a two-response ("yes" or "no") format for JSS items. Factor loadings for Morris' (1986) study are shown in Table 24 in Appendix H. The total variance explained by JSS Factors I, II, and III was 14.92, 4.17 and 3.14, respectively. Factor loadings for JSS Factor I ranged from .68 to -.53 with .33 most typical. Factor loadings for JSS Factor II ranged from .67 to -.09 with .24 most typical. Factor loadings for JSS Factor III ranged from .69 to -.63 with .18 most typical.

The results of the Morris (1986) factor analysis of the JSS and the analysis in this study identified three factors termed: (1) Perceptions of the Job; (2) Perception of Fellow Employees/Colleagues; and (3) Perceptions of Financial Incentives. Items were included in a factor if the factor loading was .30 or greater for that factor only.

Because of the larger sample size and the three-response item format used by Morris (1986), the decision was made to aggregate JSS items according to loadings established in the Morris (1986) study for any subsequent analyses using the JSS in this study. This

procedure reduced the number of items in the 82-item form used in the data collection phase of this study to 55 items. One item from those included in Morris' first factor was omitted from the JSS instrument used in this study. The 55-item form which was used in subsequent analyses to measure teachers' job satisfaction can be found in Appendix I. An item location index for the revised version of the JSS can be found in Table 25 in Appendix J.

Results of Instrument Reliability Analyses

Factor analyses of the Professional Zone of Acceptance Inventory (PZAI) and Principal Performance Description Survey (PPDS) - Teacher Form yielded instruments containing 15 and 54 items, respectively. These analyses suggested that each of these instruments measures a single construct. The factor analysis of the Job Satisfaction Scale (JSS) produced a measure containing three factors consisting of 33, 15, and 7 items, respectively. The factors were entitled Perceptions of the Job, Perceptions of Fellow Employees/Colleagues and Perceptions of Financial Incentives. Alpha reliability coefficients computed for these final items for each instrument form or factor are reported in Table 7. Alpha coefficients for the PZAI and PPDS - Teacher Form were .96 and .99, respectively. Alpha coefficients for the three JSS factors were .92, .74 and .73, respectively.

TABLE 7

Reliability Coefficients for PZAI, PPDS - Teacher Form and the Three-Factor JSS

Instrument	n	Alpha Coefficient
PZAI	315	.96
PPDS	267	.99
JSS Factor I	220	.92
JSS Factor II	220	.74
JSS Factor III	220	.73

A concurrent reliability analysis of a similar three-factor form of the JSS identified by Morris (1986) using data from 579 respondents resulted in reliability estimates of .90, .83 and .46 for the three factors Perceptions of the Job, Perception of Fellow Employees/Colleagues and Perceptions of Financial Incentives, respectively.

Tests of the Research Hypotheses

Results of statistical analyses performed to test the research hypotheses are described in this section for each hypothesis. For purposes of statistical analyses, research hypotheses will be stated in the null form. One-tailed tests for statistical significance at the .05 level were used in examining relationships between the independent and dependent variables in the sample of 47 schools.

Hypothesis 1: There is no relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and the school outcomes of student achievement and attendance.

To test the first hypothesis, Pearson product-moment correlations were computed between school mean PPDS - Teacher Form scores and school means for student achievement and attendance. Table 8 presents a summary of the intercorrelations relating to the test of this hypothesis.

TABLE 8

Summary of Correlations for the PPDS - Teacher Form and School Outcomes (n=47 schools)

Measure	PPDS (r)	p
School Outcomes		
Reading Achievement	-.10	.58
Math Achievement	-.05	.72
Composite Achievement	-.02	.95
ADA	.29	.05

One of the four possible correlations was statistically significant at the .05 level. A significant positive, but rather moderate correlation (r=.29) was established between PPDS - Teacher Form scores and school attendance. The remaining relationships between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and student achievement were inverse and approached zero. These results are mixed and show partial support for the hypothesis as it relates to student attendance. However, considered collectively, the results do not lead to the rejection of the first null hypothesis.

Hypothesis 2: There is no relationship between teachers' job satisfaction and the school outcomes of student achievement and attendance.

In order to test the second hypothesis, Pearson Product Moment Correlation Coefficients were computed between the three JSS factors and student achievement and attendance using school means as the units of analysis. Table 9 summarizes the results of these analyses. None of the correlations was statistically significant at the .05 level. The achievement/JSS correlations were mixed in direction and approached zero. The ADA/JSS correlations were negative in direction. Based on these findings, the fourth null hypothesis was not rejected.

TABLE 9

Summary of Correlations Between JSS Factors and Student Achievement and ADA (n=47 schools)

Measure	JSS Factors I	p	II	p	III	p
Achievement						
Reading	.03	.71	.03	.77	.16	.25
Mathematics	-.07	.57	-.04	.71	.03	.82
Composite	-.11	.53	-.05	.82	.15	.28
ADA	-.17	.23	-.06	.67	-.24	.10

Hypothesis 3: There is no relationship between the degree to which principals influence teachers' instruction-related behaviors and the school outcomes of student achievement and attendance.

To test this null hypothesis, Pearson product-moment correlations were computed between PZAI scores and student achievement and ADA using school means as the units of analysis. Results of these analyses are presented in Table 10. The correlations between PZAI scores and student achievement were negative and weak in magnitude ($p>.05$). A slightly positive correlation was obtained for the relationship between PZAI scores and student ADA, though it was not statistically significant ($p>.05$). These results suggest that principals' abilities to influence the instruction-related behaviors of their teachers is not significantly related to student outcomes of achievement and attendance. Consequently, the third null hypothesis was not rejected.

Hypothesis 4: There is no multivariate relationship between the school outcomes of student achievement and attendance and teachers' job satisfaction, principals' influence on teachers' instruction-related behaviors and teachers' perceptions of the effectiveness of principals' instructional leadership behavior.

In order to test this hypothesis, stepwise multiple regression procedures were performed by regressing student achievement and ADA on the PPDS - Teacher Form, PZAI and the three subscales of the JSS. First, forward selection

TABLE 10

Summary of Correlations for PZAI With Student Outcomes and the Three JSS Factors (n=47 schools)

Measure	PZAI (r)	p
Achievement		
Reading	-.12	.47
Mathematics	-.08	.57
Composite	-.03	.99
ADA	.11	.45

procedures were used to construct models containing the best combination of independent variables which correlated with the composite achievement index. Table 11 summarizes the results of this analysis. The values of R squared did not approach the .05 level of significance.

Stepwise regression procedures were then performed regressing ADA on PPDS, PZAI and the three subscales of the JSS. Table 12 presents a summary of the selection procedures for the model. The PPDS - Teacher Form, JSS Factor III and JSS Factor I were selected at steps 1, 2, and 3 in the analysis. However, a linear combination of more than one variable was not significant at the .05 level. Thus, the fourth null hypothesis was not rejected.

Hypothesis 5: There is no relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and teachers' job satisfaction.

In order to test the fifth null hypothesis, Pearson Product Moment Correlation Coefficients were computed between PPDS - Teacher Form school mean scores and the three JSS subscales. None of the correlations was statistically significant at the .05 level. The correlations between the PPDS - Teacher Form and the three JSS Factors were as follows:

1. JSS Factor I (Perceptions of the Job) and PPDS - Teacher Form; r=.15

TABLE 11

Summary of Forward Selection Procedures for Stepwise Regression of Composite Achievement on PPDS, PZAI and JSS Factors (n=47 schools)

Step	Variable Entered	Model R squared	F	p
1	JSS Factor III	.02	1.08	0.30
2	JSS Factor I	.05	1.63	0.20

TABLE 12

Summary of Forward Selection Procedures for Stepwise Regression of ADA on PPDS, PZAI and JSS Factors (n=47 schools)

Step	Variable Entered	Model R squared	F	p
1	PPDS	.08	4.00	0.05
2	JSS Factor III	.13	2.35	0.13
3	JSS Factor I	.14	0.83	0.37

2. JSS Factor II (Perceptions of Fellow Employees/Colleagues) and PPDS - Teacher Form; r=.28

3. JSS Factor III (Perceptions of Financial Incentives) and PPDS - Teacher Form; r=-.07

These results suggest that a significant positive relationship does not exist between teachers' perceptions of their principals' instructional leadership behavior and the measure of teachers' job satisfaction used in this study. Based on these results, the fifth null hypothesis was not rejected.

Hypohtesis 6: There is no relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and the degree to which principals influence teachers' instruction-related behaviors.

To test the sixth hypothesis, Pearson product-moment correlations were computed between PPDS - Teacher Form and PZAI scores using school means as the units of analysis. The resulting coefficient was positive in direction, statistically significant ($p<.001$) and moderately strong in magnitude ($r=.52$). Teachers' perceptions of their principals' instructional leadership behavior appear to be positively related to the extent to which their instruction-related behaviors are influenced by their principals. Based on these results, the sixth null hypothesis was rejected and the sixth research hypothesis was confirmed.

Hypthesis 7: There is no relationship between teachers' job satisfaction and the degree to which principals influence teachers' instruction-related behaviors.

This hypothesis was tested by examining the relationship between school mean JSS and PZAI scores. Three Pearson product-moment correlations for relationships between each of the three subscales or factors on the JSS and the PZAI were computed. These correlations were as follows: PZAI/ JSS Factor I (Perceptions of the Job) ($r=-.05$; $p>.05$); PZAI/JSS Factor II (Perceptions of Fellow Employees/Colleagues) ($r=.13$; $p>.05$); PZAI/JSS Factor III (Perception of Financial Incentives) ($r=.04$; $p>.05$). These findings show that the measure of teachers' job satisfaction used was not significantly related to principals' ability to influence teachers' instruction-related behaviors. Based on these results, the seventh null hypothesis was not rejected.

Supplemental Analyses

In addition to investigating relationships emanating from the guiding hypotheses of the study, selected supplemental analyses were performed concerning interrelationships between dependent variables and relationships between certain sample descriptive data and dependent variables.

Of first interest, was the relationship between the school socioeconomic status (SES) index (percentage of students receiving free or reduced cost lunches) and the indices of student achievement and attendance. School means

served as the units of analysis. Table 13 presents Pearson product-moment correlation coefficients that show the relationship between the school SES index, achievement and ADA. These results show that the correlations between all three measures of achievement and the SES index were high in magnitude, negative in direction and statistically significant ($p<.0001$). The relationship between mean school SES and ADA, while low and positive in direction, was not statistically significant ($p>.05$)

Next, analyses were undertaken to examine the relationship between the two school outcome indices. Pearson product-moment correlations were computed between the three measures of school achievement and average daily attendance (ADA) using school means as the units of statistical analysis. These correlations were as follows: ADA/Reading ($r=-.22$); ADA/Math ($r=-.22$); ADA/Composite ($r=-.26$). Though a slightly negative and rather moderate relationship was noted, none of these correlations exceeded the .05 level of significance.

Supplemental analyses were also performed to examine the relationship between PZAI item scores, PPDS - Teacher Form scores, and JSS subscale scores. This investigation was undertaken to identify the specific classroom procedures which are most strongly related to teachers' perceptions of principals' effectiveness as instructional leaders and teachers' job satisfaction. Pearson product-moment

TABLE 13

Pearson Correlation Coefficients for the Relationship Between School SES and School Outcomes (n=47 schools)

School Outcomes	SES (r)	p
Achievement		
Reading	-0.79	.0001
Mathematics	-0.84	.0001
Composite	-0.84	.0001
ADA	0.19	.19

correlations were computed between individual PZAI item scores and PPDS - Teacher Form scores using school means as the units of statistical analysis. All correlations between PZAI items and PPDS - Teacher Form scores were moderate in magnitude, positive in direction and statistically significant at the .001 level of significance. No single item or group of items appeared to stand out as most related to PPDS - Teacher Form scores. When the strong unitary factor structure of PZAI data for this study is considered, this finding is not surprising. Correlations between PZAI item scores and JSS subscale scores were positive in direction and low in magnitude. Correlations ranged from .06 to .26, with .12 being most typical. None of the PZAI item/JSS subscale correlations exceeded the .05 level of significance.

CHAPTER V

DISCUSSION, CONCLUSIONS, IMPLICATIONS

Purpose and Conceptual Framework

The purpose of this study was to examine the relationships between teachers' perceptions of principals' instructional leadership behavior, principals' influence on teachers' instruction-related behaviors, teacher job satisfaction and the school outcomes of student achievement and attendance. A conceptual model depicting the relationship between these variables was proposed to guide the development of the research hypotheses. This model was an extension of the previous work reported by Ellett and Walberg (1979) and reflected summary findings from the extant literature on effective schools relative to the instructional leadership behavior and influence of the building principal. The conceptual model is depicted as follows:

PRINCIPAL <==> TEACHER PERCEPTIONS <==> TEACHER <==>STUDENT
BEHAVIOR 1) Job Satisfaction PERFORMANCE OUTCOMES
2) Principal Influence

The model posits that principal behavior is a school input variable which is indirectly related to student outcomes through its effect on teachers' job satisfaction and principals' influence on teachers' instruction-related behaviors. The model assumes that teacher perceptions are among a variety of school context variables that mediate the impact of principal behavior on school outcomes and that such perceptions influence subsequent teacher classroom performance. Thus, the model proposes that principals' instructional leadership behavior, as measured by teacher perceptions, is indirectly linked to school outcomes through its influence on certain teacher perceptions (mediating variables) and subsequent teacher behavior. Reviews of pertinent literature in educational administration, studies of effective schools, teacher job satisfaction and tests of similar frameworks suggested that the conceptual model was tenable for deriving the research hypotheses tested.

For the purposes of this study, two variables mediating the school context and a measure of principal performance served as independent variables while school achievement and attendance served as dependent variables. The Principal Performance Description Survey (PPDS) - Teacher Form (Ellett and Payne, 1976) was used to measure teachers' perceptions of their principals as instructional leaders. A revised version of the Job Satisfaction Scale (JSS) (Johnson, 1955) was used to measure teachers' job satisfaction. The

Professional Zone of Acceptance Inventory (PZAI) (Kunz, 1973) was used to measure the degree to which teachers' are willing to accept principals' influence. All research hypotheses were tested for a sample of 47 schools in Louisiana using school means for independent and dependent variables as the units of statistical analysis.

Major Findings

Relationships Between Independent and Dependent Variables

The predictive hypotheses concerning the relationship between independent and dependent variables in this study were as follows:

Hypothesis 1: There is a positive relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and the school outcomes of student achievement and attendance.

Hypothesis 2: There is a positive relationship between teachers' job satisfaction and the school outcomes of student achievement and attendance.

Hypothesis 3: There is a positive relationship between the degree to which principals influence teachers' instruction-related behaviors and the school outcomes of student achievement and attendance.

Hypothesis 4: There is a significant multivariate relationship between the school outcomes of student achievement and attendance and teachers' job satisfaction, principals' influence on teachers' instruction-related behaviors and teachers' perceptions of the effectiveness of principals' instructional leadership behavior.

Results of tests of the first three hypotheses failed to support the relationships between the independent variables and the school outcomes of student achievement and attendance. A significant, positive but rather moderate correlation (r=.29) was established for the PPDS - Teacher Form measure and school average daily attendance. However, when combined collectively with PPDS - Teacher Form/ Achievement results, the first hypothesis was not considered to be confirmed. All other correlations between independent and dependent variables were not statistically significant (p>.05). Consequently, predictive hypotheses 1, 2 and 3 were not confirmed.

A fourth predictive hypothesis concerning a multivariate relationship between the indices of student outcomes and teachers' perceptions of principals' performance as instructional leaders, principals' ability to influence their instruction-related behaviors and teachers' job satisfaction was tested with stepwise regression analysis. In separate procedures, attendance and achievement were regressed on the set of independent variables. Both procedures failed to identify a linear combination of the independent variables that could account for significant amounts of variance in school achievement or attendance. This finding suggests that the independent variables investigated in this study do not combine in any

meaningful manner to explain significant variations in student outcomes.

Relationships Between Input and Mediating Variables

The conceptual framework tested in this study posited significant positive relationships between the independent variables studied. The following predictive hypotheses were proposed for these relationships:

Hypothesis 5: There is a positive relationship between teachers' perceptions of the effectiveness of principals' instructional leadership behavior and teachers' job satisfaction.

Hypothesis 6: There is a positive relationship between the teachers' perceptions of effectiveness of principals' instructional leadership behavior and the degree to which principals' influence teachers' instruction-related behaviors.

Hypothesis 7: There is a positive relationship between teachers' job satisfaction and the degree to which principals influence teachers' instruction-related behaviors.

A significant positive relationship ($r=.52$) was established between teachers' perceptions of principals as instructional leaders and teachers' willingness to accept principals' influence on their own instruction-related behaviors. Teachers report more willingness to follow principals' recommendations when they view them as "competent" in instructional matters.

Correlation coefficients for relationships proposed in hypotheses 5 and 7 were not statistically significant at the

.05 level. These findings suggest that teachers' job satisfaction is not significantly related to principals' instructional leadership behavior or to teachers' willingness to accept principals' influence in instructional matters.

Supplemental Analyses

In order to better explain the results of this study, selected supplemental analyses not directly pertinent to the research hypotheses were completed. The following findings were of special interest: (1) school mean percentages of students receiving free of reduced-cost lunches were strongly but inversely correlated with all three measures of student achievement; and (2) the relationship between school achievement and school attendance was not statistically significant.

Discussion

Overall findings of this study failed to provide support for the conceptual model as it was originally conceived. According to the model, the strongest linkages between variables should be established between mediating variables in the school environment (in this case, teacher perception measures of principal influence and job satisfaction) and school outcomes. Teacher perceptions of these factors pertinent to the school work context were

examined. Direct links between these variables and school outcomes were not established.

Of the three independent variables in the conceptual model, teachers' perceptions of principals' job performance as instructional leaders correlated significantly with school attendance. This finding suggests that the effectiveness of principals' instructional leadership behavior may be a factor contributing to the "holding power" of schools where students are concerned. This relationship takes on greater importance since the variation in school ADA for this sample was rather small. Payne, et. al. (1976) established similar relationships between PPDS scores and ADA.

When the results of the correlational analysis of the PZAI with the PPDS - Teacher Form are considered with the correlations between PZAI and school outcomes, a perplexing question arises. If, as the results suggest, teachers are willing to accept professional advice and suggestions from principals they view as being competent in the instructional area, why aren't school outcomes higher in these schools? The literature of effective schools suggests that the instructional leadership behavior of principals makes important contributions to school outcomes. The well reputed norm of teacher autonomy may explain the failure in this study to establish a relationship between the PZAI and school outcomes. Teachers' instructional competencies may

not be solely dependent on principals' influence. In spite of effective instructional leadership, teachers can exercise a great degree of discretionary power in selecting particular instructional methods, materials, curriculum and time allocations for instruction. While no measure of teacher autonomy was used in this study, this discretion may be exercised even though teachers state they are willing to accept and implement their principals' instructional suggestions.

The willingness of a subordinate to accept supervisory advice doesn't insure that the subordinate will enact suggested changes. In the case of schools, frequent in-classroom monitoring and supervision by principals may be required to increase the probability that certain instructional procedures are enacted. It may be that principals' influence and instructional leadership behavior needs to be sufficiently strong and frequently occurring to modify teachers' classroom autonomy and organizational structures such as loose coupling (Weick, 1982).

Findings concerning teachers' perceptions of principals' performance and school outcomes matched findings from a research effort which tested a conceptual scheme similar to the model examined in this study. Extensive research studies in Georgia during the mid-seventies (Payne, et. al., 1976) were also unable to establish direct linkages. However, in the Georgia studies the greatest

predictor of school outcomes was the teacher attitude measure, the School Survey (SS). The SS measures teacher perceptions of school-related factors such as administrative practices, professional work load, colleague relations, supervisory relations, educational effectiveness, performance and development, materials and equipment. It may be best described as a measure of teacher attitudes toward dimensions of the working environment. In this study, a similar but much narrower construct was measured by the JSS. Items on the JSS were primarily focused on teacher perceptions of the effect the job had on mental and physical health, financial rewards/incentives, future goals, and general emotional well-being. Therefore, the JSS is a more restricted measure of teacher perceptions concerning their working environment than the School Survey. This may explain the failure to establish positive relationships between teachers' perceptions of their job satisfaction and school effectiveness. Morris (1986), in a concurrent study using a JSS form similar to the one used in this study, found a low but inverse relationship between the JSS and school outcomes. Similarly, Edmonds (1979), in the Search for Effective Schools Study, found lower levels of teacher job satisfaction in more instructionally effective schools.

There are other tenable explanations for the failure of the study to establish a strong relationship between school outcomes and teacher job satisfaction. The academic press

may be less in schools where student achievement and attendance are low. Consequently, teachers in less effective schools may experience less job-related anxiety and stress than teachers in instructionally effective schools. Guba and Getzels (1957) theorized that the extent to which the expectations for one's role and the need-dispositions of one's personality are both congruent with organizational goals, the individual experiences satisfaction in the organization. Thus, the lack of "academic press" in low achieving schools may match teachers' need-dispositions in these schools and provide these teachers with relatively satisfying work environments. Seen in light of Maslow's (1954) theoretical notions concerning employee motivation, Edmonds offers a credible hypothesis. Maslow posited a hierarchy of needs which stimulates an individual to act on his or her environment to gratify these needs. The five types of needs Maslow identifies are: physiological, security, affiliation, esteem, and self-actualization. Once gratification of a need occurs, motivation within the individual to relieve the deficiency ceases. Is it possible that the job security needs of teachers are challenged by aggressive instructional leaders in effective schools? Could the high teacher job satisfaction noted in instructionally ineffective schools be more accurately labeled "teacher complacency"? Are high levels of teacher job satisfaction detrimental to teacher

motivation and subsequent teacher and student performance?

It is suggested here that the conceptual model should be revised to include teachers' attitudes toward more holistic aspects of the school environment such as administrative policy, availability of instructional materials, educational effectiveness and the like rather than teacher job satisfaction as a factor mediating the impact of principals' instructional leadership behaviors on school outcomes. Research has linked these kinds of teacher attitudes to school productivity (Coughlan and Cooke, 1974; Ellett et. al., 1977). In these studies, the School Survey was used to measure teachers' agreement or disagreement with the administrative practices, educational effectiveness, collegial relations and similar aspects of the working environment.

A revised conceptual model is depicted in Figure 5-1. It might be noted that the model was restructured to make use of the predictive power of teachers' perceptions of broader aspects of their working environment rather than their satisfaction with the job. Additionally, the model benefits from the predictive power of teachers' perceptions of the frequency of their principals' instructional leadership behavior as an input variable. Inclusion of this variable in the model allows comparison among schools of their relative levels of organizational "tightness" or principal-teacher interaction.

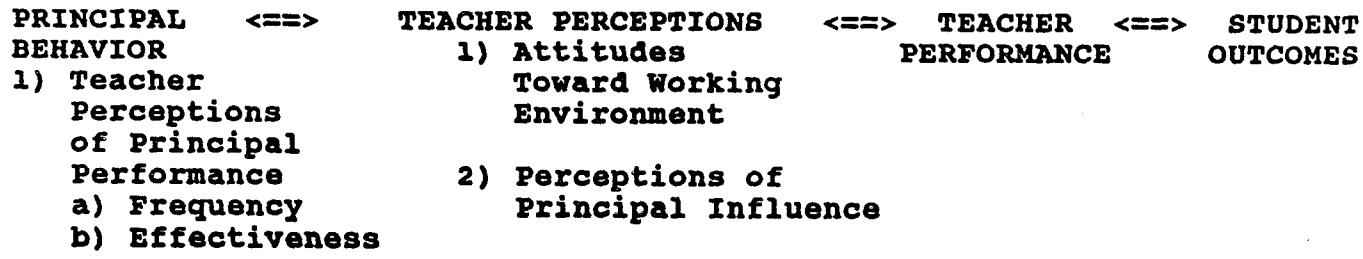


Figure 5-1. Revised conceptual model

Supplemental analyses completed in this study yielded interesting results which may explain some relationships between the independent and dependent variables investigated. Analysis of the socioeconomic index used in this study showed significant relationships with all three measures of student achievement. Highly significant, but inverse correlations are reported for relationships between the percentage of students receiving free or reduced-cost lunches and mean school national percentile ranks for reading, mathematics and composite scores on the standardized achievement test - Science Research Associates Achievement Series (1978) used in the study. Results suggested that higher school percentages of students receiving free or reduced cost lunches were related to lower levels of school achievement. The results support findings in the other school effectiveness studies (Coleman, 1966; and Jencks, 1972). Student socioeconomic status appears to play a significant role in determining academic achievement. However, school effectiveness research has identified effective instructional programs in schools with low socioeconomic populations (Edmonds,1979). It is not clear, from the results of this study, what combination of school context variables diminishes or negates the effect of student SES on student achievement. However, in view of this study's findings and pertinent theoretical frameworks in educational administration, the model as it is

reconceptualized in Figure 5-1 may offer stronger variable relationships for explaining variations in achievement among schools with low SES student populations than the original model guiding this study.

Implications

Implications for Theoretical Frameworks in Educational Administration

Findings of this study did not support the research model as originally conceptualized. However, certain variable relationships posited in the model appear to be reasonable for explaining the linkages between principal behavior, the school environment and school outcomes. Re-examination of the variable relationships suggested in the original model revealed that certain variables in the model should be omitted and others added to render it more predictive of school outcomes.

Results of previous research that investigates the relationship between principal effectiveness and school outcomes suggests that teachers' attitudes toward aspects of their work environment demonstrate the strongest relations to school outcomes (Payne, et. al., 1976; and Ellett, et. al., 1977). In these studies, teachers' attitudes toward their work environment were measured by items related to broader aspects of the working environment. For this study, the teacher work attitude variable was conceptualized as teacher job satisfaction. It was of special interest to

assess how teachers felt their job impacted on their physical and emotional well-being. By limiting the assessment of teacher work attitudes to the measurement of teachers' personal satisfaction with their jobs, more important teacher perceptions such as perceptions of the effectiveness of the schools' educational program, may have been neglected. More global measures of teachers' job-related perceptions and school climate seem to provide a clearer picture of the school environment as it relates to principal behavior and influence.

Nevertheless, the findings reported here add understanding to school context variables and effective schools and suggest that teacher job satisfaction may not be an important element of school effectiveness. In fact, it might be hypothesized that teacher job satisfaction is inversely related to school effectiveness. Edmonds (1979) reported this finding in the Search for Effective Schools Study. Higher teacher job satisfaction in less effective schools was believed to be related to teacher complacency with existing levels of student achievement in those schools. This logic seems supported by the more recent study of Morris (1986) who reported a moderate, but inverse relationship between the JSS and school achievement in a large sample of 79 schools. Further research examining satisfaction will remain difficult until certain measurement problems are resolved. For example, there are many

questions concerning how the job satisfaction construct should be conceived and measured. Several items in the original JSS instrument were not related to teachers' work environment and therefore lacked face validity. Consequently, these items were removed from the JSS version used. The teacher job satisfaction variable, at present, does not appear to be clearly conceived by educational researchers and theorists. Although the relationship between need-dispositions and organizational goals may play a part in teachers' ultimate job satisfaction, most job satisfaction measures do not assess this relationship. When conceptualized this way, job satisfaction may exist independently of teachers' positive or negative attitudes toward certain job conditions. Job expectations may still be congruent with teacher need-dispositions and personalities. A simple summing up of an organizational member's agreements or disagreements with certain aspects of the job may not be an adequate measure of the job satisfaction construct.

Conceptual problems may also exist in the way school effectiveness is seen to relate to teacher job satisfaction. As has been stated earlier, findings concerning the relationship between teacher job satisfaction and school outcomes have been mixed. Presently, job satisfaction is viewed as a continuous variable wherein satisfaction and dissatisfaction are at polar ends of a continuum. It has

been assumed in many research studies, that higher school effectiveness should be associated with higher levels of satisfaction. However, findings in this and other studies challenge this conceptualization. Research has uncovered high teacher job satisfaction in ineffective schools (Brookover and Lezotte, 1979) and effective schools (California School Effectiveness Study, 1977). Teacher job satisfaction might be best conceived as a curvilinear rather than continuous variable. For school effectiveness, there seems to exist a threshold amount for teacher job satisfaction such that too much satisfaction yields "complacency" and eventuates in lowered levels of school productivity and achievement. A curvilinear view of the relationship between levels of teacher job satisfaction and school outcomes also helps to explain teacher dissatisfaction and tension found in improving schools.

Findings concerning teachers' willingness to accept principals' influence added to the power of the conceptual model for describing the relationships between principals' effectiveness as instructional leaders and school outcomes. A significant positive relationship was found between teachers' perceptions of principals' job performance and teachers' willingness to accept principals' influence. Apparently, principals are subjected to a legitimizing process by schools' instructional staff. Peabody (1962) reported similar findings in a comparative study of schools

with two other public service organizations. These findings suggest that teacher compliance, especially as it relates to acceptance of professional advice from principals, is leader specific. Principals exhibit behaviors which shape teachers' perceptions of their competence as instructional leaders. Those principals who are perceived as being competent instructional leaders are better able to effect higher levels of compliance than principals who are perceived as less competent.

The problem that remains to be resolved by the conceptual model is the relationship between teachers' willingness to accept principals' professional suggestions and teacher performance. Lortie (1969) posits that the reward system within the elementary school has certain consequences for the teacher's relationship with superordinates. The critical rewards of teaching arise from effective communication with students which causes teachers to sense that learning has taken place. Since these rewards are largely independent of administrative action, the teacher's relationship to administrative superiors can move away from "subordination" towards "exchange".

An important question needs to be considered. How can an effective principal guide the school's staff toward classroom innovations without threatening teachers' feelings of classroom autonomy? It may be necessary for principals to become more assertive in the instructional area in order

to enact beneficial instructional changes. Studies of effective schools have noted that effective principals closely monitor school performance (Vallina, 1978; and Brookover et. al., 1977). It seems feasible that effective instructional leadership and high levels of autonomy cannot co-exist. Closer classroom supervision and a lowered norm of teacher autonomy may be necessary to ensure a "quality" instructional program and an effective school. Investigation of the frequency of certain principal behaviors or the organizational tightness may provide additional clues as to principals' effectiveness in effective schools.

The conceptual model used in this study seems a reasonable one for understanding well documented "turnaround" schools. School principals and teachers in low socioeconomic schools may take charge of alterable variables in the school environment to increase student achievement beyond expected levels. This study found a strong relationship between school socioeconomic status and school achievement. However, there remain many alterable variables in the school environment that may serve to diminish the effects of social class on achievement. Therefore, it is important that further research be undertaken to enhance and expand the conceptual model by including other measures of school context variables that may make significant contributions to school outcomes.

Recommendation for Further Research

The shortened version of the JSS used in this study provides future researchers with a teacher job satisfaction measure which is relatively easy to administer. Due to the JSS's response format and number of items, administration time is minimized. Morris (1986) investigated the psychometric properties of a similar version of the JSS and found that teachers' perceptions of their job satisfaction were found to be related to conditions surrounding three dimensions of their working environment. These perceptions were entitled: (1) Perceptions of the Job; (2) Perceptions of Fellow Employees/Colleagues; and (3) Perceptions of Financial Incentives. A significant amount of agreement was found between the factor structure of JSS data in this study and Morris' study. However, as previously discussed, better operational definitions of job satisfaction than the JSS may be needed in future research.

Results of this study raise serious questions concerning the predictive validity of the JSS and other job satisfaction measures which can only be clarified by further research. Current conceptualizations of job satisfaction may need to be closely examined. Job satisfaction, for the most part, is conceived as a continuous variable wherein positive feelings or attitudes toward certain aspects of the job environment represents high satisfaction and negative attitudes toward one's job and work environment represent

dissatisfaction. It is assumed that teachers' positive attitudes toward the work environment will lead to better classroom performance and greater student outcomes. However, results of studies relating job satisfaction, viewed this way, with student productivity have provided mixed results. As was mentioned earlier, there may exist a point at which increased teacher job satisfaction yields diminishing returns in teacher motivation and performance. Further research should provide some insight into this relationship. It appears that more generalized measures of teacher perceptions of the school climate provide stronger linkages to school outcomes within the conceptual model investigated.

Kunz's (1973) Professional Zone of Acceptance Inventory (PZAI) was confirmed as a valid and internally consistent instrument for measuring teachers' willingness to accept principals' influence. The single factor structure reported by Kunz was strongly confirmed by the results of data analysis in this study. Alpha reliability estimates also closely mirrored those reported by Kunz for the PZAI. It appears that the PZAI is a sound measurement device for assessing the degree to which teachers accept principals' suggestions in school-related matters. However, as previously noted, translating these perceptions into practice may interact with other elements of the school organization such as a teacher norm of autonomy and the school's

organizational coupling structure.

From the teacher perspective, principals' effectiveness as instructional leaders is an important element of influence on instruction. This finding may demonstrate important dimensions of principal "legitimacy" that should be investigated in future research. For example, it might be hypothesized that where instructional leadership is low, principal legitimacy is low and teacher autonomy is high. This situation may be less than optimal and effectiveness and productivity may be hindered.

This study failed to establish the direction of causality for relationships posited in the conceptual model. It is possible that mediating variables in the school environment (teacher job satisfaction and teachers' acceptance of principals' influence) impact subsequent principal behavior. Additionally, it is possible that other school environmental factors such as the socioeconomic status of the student population, the degree of parental involvement and teacher experience shape principal instructional leadership behavior. Further inquiry employing models similar to the one investigated in this study should benefit from such multivariate procedures as LISREL (Linear Structural Relations) (Joreskog, 1978). LISREL procedures should help investigators to understand reciprocal relationships in these theoretical models. However, rather large sample sizes (200 or more schools) are

required for these analyses.

Due to the ex-post facto research design of this study, variable manipulations and on-site confirmations of posited variable relationships were limited. Nevertheless, survey research like that undertaken in this study marks a starting point for understanding the relationship between principal behavior and school productivity in instructionally effective schools. However, if inquiry continues along these lines, further research using qualitative or experimental research designs may better explain relationships between variables. Several schools in this study were characterized by high levels of school outcomes, low levels of teacher job satisfaction, high percentages of low SES students, and high levels of perceived principal performance and influence. On-site observations of these unusually effective schools may serve to confirm previous survey research findings and expose other avenues of possible investigation. As a suggestion for future experimental designs, effective principals might be transferred to instructionally ineffective schools. School achievement and attendance could then be monitored to determine if significant changes occured. These types of research endeavors could possibly expand the conceptual model used in this study by adding manipulable school variable relationships which predict school productivity.

Overall results of this study did not support recent

findings of effective school studies which relate principals' instructional leadership with student performance. However, these findings do not suggest that special qualities of effective schools cannot be identified. The findings of this study concerning teachers' perceptions of principals' effectiveness as instructional leaders and teachers' willingness to accept principals' professional suggestions offer some insight into the relationships which mediate principal performance and school outcomes. Further investigations of the teacher autonomy structure, other school variables, and organizational coupling may reveal other linkages which serve to enhance or thwart principals' behavioral intentions. This should help us to better understand the linkages between principals' behavioral intentions and school achievement and attendance. Given a better understanding of the relationships between principals' behaviors and factors mediating school outcomes, administrators and teachers may be able to assess their schools in view of these relationships and enact beneficial and productive changes.

Summary

This study investigated the relationship between principals' instructional leadership behaviors and school effectiveness. Certain school context variables, teachers' job satisfaction and teachers' willingness to accept

principals' influence in the instructional realm, were believed to mediate the relationship between principals' behavior and school outcomes. From this perspective, principals' behavior was viewed as being indirectly related to school outcomes. For the purposes of this study, teachers' job satisfaction and teachers' willingness to accept principals' professional advice were conceptualized as variables mediating the relationship between principals' effectiveness as instructional leaders and school outcomes of achievement and attendance.

Teachers in elementary schools (n=47) in the sample responded to two of the three instruments used to measure principal behavioral inputs and teacher perception variables. Correlational analyses were undertaken to determine the magnitude and direction of the relationships between independent and dependent variables, mediating variables, and selected school descriptive indices. Additionally, regression analyses were performed in an attempt to identify a linear combination of independent variables which could best explain variation in school achievement and attendance.

Analyses of the data indicated that a significant relationship ($p < .05$) existed between teachers' perceptions of principals' effectiveness as instructional leaders and school attendance. A significant relationship ($p < .001$) was also established between teachers' perceptions of

principals' job performance and teachers' willingness to accept influence in the instructional realm from principals. None of the other relationships between independent and dependent variables posited in the conceptual model was found to be statistically significant.

Major results of the study did not establish a direct link between principals' instructional leadership behavior and school outcomes. Nor were linkages established between principals' instructional leadership behavior and teacher job satisfaction. However, the results may have been influenced by the way in which teacher job satisfaction and and work attitudes were measured in the study. Considered collectively, the results served to partially confirm relations between principal behavioral inputs, school mediating variables and school outcomes identified in past research (Payne, et. al., 1976; Ellett and Walberg, 1979) and documented a significant positive relationship between principals' instructional leadership and influence on teachers as well. The continuing challenge for researchers studying effective schools and leader behavior is to establish linkages between such behavior and the host of alterable school context variables that mediate the relationship between leader behavior and school outcomes. Broadening our understanding of effective schools from this perspective may identify more prescriptive approaches to positive school change.

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APPENDIX A

Professional Zone of Acceptance Inventory (PZAI)

Below are listed descriptions of broad areas in which your principal may make specific professional recommendations. Describe, as accurately as you can, your probable frequency of following the recommendation.

Directions:
A. READ EACH ITEM CAREFULLY.
B. CONSIDER HOW FREQUENTLY YOU WOULD BE INFLUENCED BY YOUR PRINCIPAL'S RECOMMENDATION IN THE AREA DESCRIBED.
C. DECIDE WHETHER YOU WOULD BE INFLUENCED (1) NEVER, (2) SELDOM, (3) OCCASIONALLY, (4) OFTEN, OR (5) ALWAYS.
D. CIRCLE THE NUMBER BENEATH THE APPROPRIATE RESPONSE.
E. ANSWER ALL QUESTIONS IN A MANNER YOU FEEL MOST ACCURATELY DESCRIBES YOUR PROBABLE BEHAVIOR.

YOUR PRINCIPAL HAS MADE A PROFESSIONAL RECOMMENDATION WITHIN EACH OF THE FOLLOWING AREAS:	THE PROFESSIONAL RECOMMENDATION WOULD INFLUENCE MY BEHAVIOR: (circle your answer)				
	NEVER	SELDOM	OCCASIONALLY	OFTEN	ALWAYS
The methods you are to use while conducting parent conferences.....	1	2	3	4	5
The methods you are to use for evaluation of pupil progress.....	1	2	3	4	5
The methods to be used to discipline students in your classroom.....	1	2	3	4	5
The determination of time allotments for remedial help for students.....	1	2	3	4	5
The change and modification of existing school curricula....	1	2	3	4	5
The evaluation of the success of your subject area.....	1	2	3	4	5

YOUR PRINCIPAL HAS MADE A PROFESSIONAL RECOMMENDATION WITHIN EACH OF THE FOLLOWING AREAS:	THE PROFESSIONAL RECOMMENDATION WOULD INFLUENCE MY BEHAVIOR: (circle your answer)				
	NEVER	SELDOM	OCCASIONALLY	OFTEN	ALWAYS
The rules governing desirable methods and techniques within your classroom.....	1	2	3	4	5
The nature and extent of your in-service educational requirements.....	1	2	3	4	5
The selection of supplies and equipment related to your course.....	1	2	3	4	5
The degree of student proficiency needed to pass each grade and subject.....	1	2	3	4	5
The evaluation of the success of your instruction.....	1	2	3	4	5
The determination of your course content.....	1	2	3	4	5
The evaluation of the success of the school curriculum.....	1	2	3	4	5
The implementation of new curriculum offerings.....	1	2	3	4	5
The grouping of students for your classes.....	1	2	3	4	5

APPENDIX B

Principal Performance Description Survey (PPDS) - Teacher Form

In this section, you are asked to give your opinion of how well you believe your principal performs selected activities in your school. Consider the number of opportunities available to your principal to perform each task. Next, decide how effectively your principal performs this task. Then, circle the appropriate number to the right of each item. Try to consider each individual item on the basis of its own content before answering, not in relationship to ratings you have given previous items. Since individual teacher opinions are important in this section, do not ask other teachers for their opinions or help.

DIRECTIONS:
1. Read each item carefully.
2. Circle the number, according to the scale below, which best matches what you believe to be your principal's effectiveness at performing that task.

1---"INEFFECTIVE"

2---"SOMEWHAT EFFECTIVE"

3---"EFFECTIVE"

4---"HIGHLY EFFECTIVE"

1. Evaluates the instructional climate by observing in the classroom.....	1	2	3	4
2. Works with teachers in formulating grading practices and procedures.....	1	2	3	4
3. Encourages teachers to consider individual differences when evaluating student performance and progress.....	1	2	3	4
4. Discusses changes in the educational program with teachers.....	1	2	3	4
5. Encourages teachers to work together in planning and modifying the curriculum.....	1	2	3	4
6. Informs teachers of general teaching practices and skills for which they are responsible.....	1	2	3	4
7. Encourages teachers to try new and innovative teaching methods in helping the consistently failing student.....	1	2	3	4
8. Discusses problems of consistently failing students with teachers.....	1	2	3	4

1---"INEFFECTIVE"

2---"SOMEWHAT EFFECTIVE"

3---"EFFECTIVE"

4---"HIGHLY EFFECTIVE"

9.	Discusses classroom goals and procedures with teachers.....	1	2	3	4
10.	Works with teachers in understanding and using results of the school testing program....	1	2	3	4
11.	Plans a variety of instructional programs to meet individual learner needs.....	1	2	3	4
12.	Works with curriculum committees to establish educational goals of the school.....	1	2	3	4
13.	Work with faculty committees to review curriculum content and organization.....	1	2	3	4
14.	Works with teachers in establishing student performance standards.....	1	2	3	4
15.	Works with teachers in evaluating the classroom instructional climate.....	1	2	3	4
16.	Discusses with teachers the importance of individual student differences.....	1	2	3	4
17.	Works with teachers in designing and using instruments to evaluate the instructional program.....	1	2	3	4
18.	Works with teachers in evaluating the instructional objectives of the school.....	1	2	3	4
19.	Observes student/teacher interactions in the classroom.....	1	2	3	4
20.	Works with teachers in identifying students in need of special diagnostic testing.....	1	2	3	4
21.	Encourages teachers to generate new curriculum ideas.....	1	2	3	4
22.	Discusses curriculum content and modifications at faculty meetings.....	1	2	3	4
23.	Organizes teacher committees to evaluate curriculum content.....	1	2	3	4
24.	Works with teachers in designing classroom environments conducive to learning.....	1	2	3	4
25.	Encourages teachers to plan individualized instructional programs.....	1	2	3	4
26.	Discusses classroom instructional objectives with individual teachers.....	1	2	3	4
27.	Encourages teachers to use a variety of methods to reward student achievements.....	1	2	3	4
28.	Informs teachers of available instructional materials and equipment needs.....	1	2	3	4
29.	Works with staff in prioritizing instructional materials and equipment needs.....	1	2	3	4
30.	Informs teachers of budgetary allocations for instructional materials and equipment.....	1	2	3	4

1---"INEFFECTIVE"

2---"SOMEWHAT EFFECTIVE"

3---"EFFECTIVE"

4---"HIGHLY EFFECTIVE"

31.	Develops a system allowing teachers to work cooperatively in educational planning.....	1	2	3	4
32.	Communicates to staff the importance of their participation in school policy and decision-making.....	1	2	3	4
33.	Meets with teachers to discuss individual student needs.....	1	2	3	4
34.	Encourages teachers to be "objective" in using information in students' permanent records.....	1	2	3	4
35.	Informs teachers of policies and guidelines to be followed in including and using information in students' permanent records.....	1	2	3	4
36.	Participates in professional development and improvement activities with teachers.....	1	2	3	4
37.	Discusses duties and responsibilities with staff prior to assignment.....	1	2	3	4
38.	Assesses the needs of professional education staff in the school.....	1	2	3	4
39.	Meets with staff members on a regular basis to discuss and evaluate staff assignments.....	1	2	3	4
40.	Delegates authority for classroom operation to teachers.....	1	2	3	4
41.	Encourages teacher "feedback" concerning the school's policies and operation.....	1	2	3	4
42.	Discusses the results of classroom observations with teachers.....	1	2	3	4
43.	Discusses the results of staff evaluations with individual staff members.....	1	2	3	4
44.	Works with teachers in understanding and using information in student cumulative records.....	1	2	3	4
45.	Discusses with teachers the importance of maintaining confidentiality of information in student records.....	1	2	3	4
46.	Collects information about teaching practices by observing teachers in the classroom.....	1	2	3	4
47.	Publicly recognizes and commends teachers for their professional accomplishments.....	1	2	3	4
48.	Encourages teachers to inform parents about school programs and activities through students.....	1	2	3	4
49.	Collects information on staffing and personnel needs from school staff.....	1	2	3	4
50.	Discusses students' classroom behavior problems with students and teachers.....	1	2	3	4
51.	Works with teachers in defining discipline problems.....	1	2	3	4

1---"INEFFECTIVE"

2---"SOMEWHAT EFFECTIVE"

3---"EFFECTIVE"

4---"HIGHLY EFFECTIVE"

52. Arranges for student/parent/teacher conferences to discuss student behavior and discipline problems.....1 2 3 4

53. Arranges for parental involvement in the educational program.....1 2 3 4

54. Informs parents of mastery skills being pursued in each grade level.....1 2 3 4

APPENDIX C

Job Satisfaction Scale (JSS)

This section contains statements regarding your feelings and attitudes about your work and your plans for the future. Read each statement and decide how you feel about it. Some of the questions are very similar but have somewhat different meanings, so answer every question even though you may feel that it has already appeared in the list.

DIRECTIONS:
A. Read each statement carefully.
B. Decide whether you agree or disagree with the statement.
C. Circle "Y" (yes) if you agree or "N" (No) if you disagree. Circle only one response.

MY PRESENT JOB:

1. tires me too much.....Y N
2. forces me to maintain too fast a pace.....Y N
3. has a bad effect on my health.....Y N
4. requires me to work too long hours.....Y N
5. gets me restless during working hours and makes me feel that the day is dragging endlessly.....Y N
6. makes my work suffer because I have too much to do.....Y N
7. gets more difficult for me each year.....Y N
8. forces me to work with certain individuals that I do not like .....Y N
9. allows me to make real and lasting friends among my working associates.....Y N
10. permits me to work with associates who stimulate me to do better work.....Y N
11. permits me to know where I stand with my employer.....Y N
12. does not provide extra people to help with the work I am doing.....Y N
13. requires me to take more responsibilities in my work than I desire.....Y N
14. permits people under whom I work to make available the materials, information, and the assistance I need to do my best work.....Y N
15. permits the people under whom I work desirous of and willing to make improvements in my working conditions.....Y N
16. permits adequate explanation of policies and problems of the people under whom I work.....Y N
17. permits me to get along satisfactorily with the people under whom I work.....Y N
18. permits respect and regard for the people under whom I work.....Y N
19. permits the people under who I work to make unfair demands on my free time.....Y N
20. makes me feel I am paid a fair salary for the work I do.....Y N

MY PRESENT JOB:

21. provides sufficient income to meet my financial obligations and to support my family.....Y N
22. does not allow me to dress as I like because of insufficient income.....Y N
23. does not allow me to live as I would like because of insufficient income.....Y N
24. allow adequate and fair arrangements for absences due to illness.....Y N
25. has a method of payment of my earning which inconveniences me.....Y N
26. produces a fear of losing my job.....Y N
27. makes me feel as efficient as the average person with whom I work.....Y N
28. makes me feel that there is no prejudice toward my age group in my occupation (e.g. that I am too old or too young).....Y N
29. offers eventual retirement security.....Y N
30. gives me more real personal satisfaction than the things I do in my spare time.....Y N
31. makes me feel that I must look outside my work for those things that make life worthwhile and interesting.....Y N
32. is so interesting that it is on my mind a lot when I am not at work.....Y N
33. is so interesting that I talk about it a great deal after working hours.....Y N
34. makes me feel that my life would seem empty without my work to occupy me.....Y N
35. makes me feel that I would continue to work if it were not financially necessary.....Y N
36. makes me feel really interested in my job.....Y N
37. makes me feel that I selected the wrong occupation.....Y N
38. is in an area of work I wish to remain in permanently.....Y N
39. would be chosen over any other line of work, if I had the choice.....Y N
40. is the job I really wanted to enter when I started it.....Y N
41. makes me badly flustered and jittery.....Y N
42. makes me come home upset, angry, or irritable.....Y N
43. makes me come home with a feeling of satisfaction over work well done.....Y N
44. makes me frequently discouraged.....Y N
45. makes me generally happy and cheerful.....Y N
46. makes me worry a lot daily.....Y N
47. is the kind I gladly return to after a vacation.....Y N
48. is worthwhile and important.....Y N
49. utilizes my abilities.....Y N
50. makes me proud of my job and my work.....Y N
51. makes me ashamed.....Y N
52. is respected by my family and friends.....Y N
53. demands the general respect of people.....Y N
54. detracts from my status in the community where I live.....Y N
55. makes me embarrassed when people ask what work I do.....Y N
56. gives me the opportunity to express my own ideas.....Y N

MY PRESENT JOB:

57. is too confining to suit me.....Y N
58. is too far from home.....Y N
59. offers pleasant work surroundings.....Y N
60. forces me to live in home surrounding which are uncomfortable or inadequate according to my standards.....Y N
61. gives me enough varied experiences.....Y N
62. ties me down or restricts my freedom too much.....Y N
63. helps me toward the financial goals I have set for myself.....Y N
64. helps me toward the occupational goals I have set set for myself.....Y N
65. makes it possible to attain my vocational goals in that portion of my life that is still ahead of me.....Y N
66. is a lifetime career.....Y N
67. offers a promising vocational future.....Y N
68. offers more satisfaction the longer I have it.....Y N
69. makes me feel that I have been successful thus far in my career.....Y N
70. makes me feel less satisfied with my work as time goes on.....Y N
71. makes me feel at ease in the presence of the people under whom I work.....Y N
72. enables me to get the promotions and pay increases which I feel I deserve.....Y N
73. makes me sorry that I have it now.....Y N

IF I COULD, I WOULD:

74. like to secure a different job, either in the same or another occupation.....Y N
75. decline an opportunity to change my present job for one of equal pay, security and status.....Y N
76. choose a different line of work if I were starting all over again at age 18.....Y N

I FEEL THAT I:

77. have general interest and attitudes about the same as those of my fellow workers who have similar jobs.....Y N
78. have had adequate preparation for the job I now hold.....Y N
79. have an adequate understanding of what is expected of me in my present job.....Y N
80. am competent and fully able to handle my job.....Y N
81. generally get along well with the persons with whom I work with on my present job.....Y N

82. I am actively looking for another job at present.....Y N

APPENDIX D

TABLE 14

Distribution of Participants by Schools and Instrument Set Returns Rates for the Original Sample (n=61)

School Number	Faculty Size	Instrument Sets Returned	Return Rate (%)
1	8	6	75
2	19	13	68
3	19	11	58
4	24	21	88
5	17	15	88
6	11	8	73
7	29	17	59
8	18	11	61
9	15	14	93
10	33	12	36
11	17	15	88
12	10	8	80
13	11	7	64
14	23	2	9
15	16	15	94
16	13	12	92
17	29	0	0
18	15	14	93
19	21	5	24
20	29	13	45
21	8	8	100

TABLE 14 (continued)

Distribution of Participants by Schools and Instrument Set Returns Rates for the Original Sample (n=61)

School Number	Faculty Size	Instrument Sets Returned	Return Rate (%)
22	8	3	38
23	20	18	90
24	20	7	35
25	21	19	90
26	15	13	87
27	17	0	0
28	9	7	78
29	24	9	38
30	13	9	69
31	15	12	80
32	12	4	33
33	12	4	33
34	24	11	46
35	14	0	0
36	31	20	65
37	16	11	69
38	18	0	0
39	12	8	67
40	22	14	64
41	12	5	42
42	28	14	50

TABLE 14 (continued)

Distribution of Participants by Schools and Instrument Set Returns Rates for the Original Sample (n=61)

School Number	Faculty Size	Instrument Sets Returned	Return Rate (%)
43	14	7	50
44	28	10	36
45	15	7	47
46	16	3	19
47	19	9	47
48	24	4	17
49	14	3	21
50	19	5	26
51	16	8	50
52	18	9	50
53	23	6	26
54	44	11	25
55	10	2	20
56	7	1	14
57	41	13	32
58	18	7	39
59	30	5	17
60	11	3	27
61	29	9	31
TOTALS	1144	539	47[a]

[a] Represents percentage of instrument sets completed.

APPENDIX E

TABLE 15

Summary of Item Means and Standard Deviations for the Professional Zone of Acceptance Inventory (n=340)

PZAI Item	$\bar{X}$	S.D.
PZAI I	3.84	0.99
PZAI 2	4.05	0.93
PZAI 3	3.83	0.99
PZAI 4	3.61	1.08
PZAI 5	4.05	0.97
PZAI 6	3.98	0.94
PZAI 7	3.75	1.05
PZAI 8	3.89	1.08
PZAI 9	3.68	1.11
PZAI 10	4.21	0.95
PZAI 11	4.13	0.94
PZAI 12	3.84	1.08
PZAI 13	4.05	0.96
PZAI 14	4.00	0.96
PZAI 15	3.73	1.11
TOTAL	57.94	12.49

TABLE 16

Summary of Item Means and Standard Deviations for the Principal Performance Description Survey - Teacher Form (n=327)

PPDS Item	$\bar{X}$	S.D.
PPDS 1	3.11	0.91
PPDS 2	3.05	0.91
PPDS 3	3.33	0.74
PPDS 4	3.34	0.81
PPDS 5	3.29	0.87
PPDS 6	3.36	0.82
PPDS 7	3.04	0.90
PPDS 8	3.04	0.91
PPDS 9	3.20	0.86
PPDS 10	3.06	0.94
PPDS 11	2.71	0.99
PPDS 12	3.06	0.95
PPDS 13	2.98	0.94
PPDS 14	2.96	0.92
PPDS 15	3.02	0.92
PPDS 16	3.00	0.89
PPDS 17	2.70	0.98
PPDS 18	3.16	0.88
PPDS 19	3.19	0.94
PPDS 20	2.91	0.95
PPDS 21	3.00	0.95

TABLE 16 (continued)

Summary of Item Means and Standard Deviations for the Principal Performance Description Survey - Teacher Form (n=327)

PPDS Item	$\bar{X}$	S.D.
PPDS 22	3.19	0.87
PPDS 23	2.93	0.97
PPDS 24	2.89	0.99
PPDS 25	3.01	0.94
PPDS 26	2.98	0.96
PPDS 27	3.14	0.92
PPDS 28	3.12	0.92
PPDS 29	3.06	0.94
PPDS 30	3.23	0.91
PPDS 31	2.92	0.99
PPDS 32	3.08	1.00
PPDS 33	3.07	0.94
PPDS 34	3.22	0.85
PPDS 35	3.33	0.84
PPDS 36	3.19	0.89
PPDS 37	3.25	0.87
PPDS 38	3.10	0.98
PPDS 39	2.98	1.01
PPDS 40	3.40	0.82
PPDS 41	3.10	0.98
PPDS 42	3.43	3.43

TABLE 16 (continued)

Summary of Item Means and Standard Deviations for the Principal Performance Description Survey - Teacher Form (n=327)

PPDS Item	$\bar{X}$	S.D.
PPDS 43	3.23	0.88
PPDS 44	2.94	0.99
PPDS 45	3.40	0.82
PPDS 46	3.05	0.98
PPDS 47	3.13	1.00
PPDS 48	3.54	0.64
PPDS 49	3.17	0.89
PPDS 50	3.21	0.97
PPDS 51	3.11	1.04
PPDS 52	3.23	0.95
PPDS 53	3.28	0.86
PPDS 54	3.31	0.86

TABLE 17

Summary of Item Response Frequencies and Percentages (n=345) for Each Job Satisfaction Survey Item

JSS Item	"No"	"Yes"
JSS 1	87 (25)	258 (75)
JSS 2	119 (35)	226 (65)
JSS 3	60 (17)	286 (83)
JSS 4	116 (35)	220 (65)
JSS 5	28 (08)	312 (92)
JSS 6	122 (36)	218 (64)
JSS 7	84 (25)	249 (75)
JSS 8	64 (19)	278 (81)
JSS 9	30 (09)	315 (91)
JSS 10	54 (16)	291 (84)
JSS 11	67 (20)	268 (80)
JSS 12	149 (43)	195 (57)
JSS 13	97 (28)	247 (72)
JSS 14	90 (26)	251 (74)
JSS 15	90 (27)	250 (73)
JSS 16	69 (20)	273 (80)
JSS 17	19 (06)	323 (94)
JSS 18	35 (10)	307 (90)
JSS 19	85 (25)	257 (75)
JSS 20	272 (81)	64 (19)

Note. Numbers in parentheses represent corresponding percentages for response frequencies.

TABLE 17 (continued)

Summary of Item Response Frequencies and Percentages (n=345) for Each Job Satisfaction Survey Item

JSS Item	"No"	"Yes"
JSS 21	264 (78)	75 (22)
JSS 22	166 (49)	175 (51)
JSS 23	205 (61)	130 (39)
JSS 24	48 (14)	295 (86)
JSS 25	82 (24)	261 (76)
JSS 26	33 (10)	304 (90)
JSS 27	39 (11)	302 (89)
JSS 28	100 (29)	244 (71)
JSS 29	46 (14)	287 (86)
JSS 30	156 (47)	179 (53)
JSS 31	117 (35)	220 (65)
JSS 32	171 (50)	171 (50)
JSS 33	155 (46)	186 (54)
JSS 34	155 (46)	186 (54)
JSS 35	147 (43)	195 (57)
JSS 36	63 (19)	278 (81)
JSS 37	61 (18)	276 (82)
JSS 38	95 (28)	239 (72)
JSS 39	130 (39)	207 (61)
JSS 40	62 (18)	285 (82)

Note. Numbers in parentheses represent corresponding percentages for response frequencies.

TABLE 17 (continued)

Summary of Item Response Frequencies and Percentages (n=292) for Each Job Satisfaction Survey Item

JSS Item	"No"	"Yes"
JSS 41	55 (16)	288 (84)
JSS 42	108 (32)	225 (68)
JSS 43	85 (25)	255 (75)
JSS 44	177 (52)	162 (48)
JSS 45	93 (27)	247 (73)
JSS 46	120 (35)	220 (65)
JSS 47	96 (28)	242 (72)
JSS 48	19 (05)	325 (95)
JSS 49	28 (08)	316 (92)
JSS 50	49 (15)	290 (85)
JSS 51	20 (06)	319 (94)
JSS 52	33 (10)	308 (90)
JSS 53	106 (31)	232 (69)
JSS 54	18 (05)	323 (95)
JSS 55	23 (07)	317 (93)
JSS 56	51 (15)	292 (85)
JSS 57	31 (09)	309 (91)
JSS 58	33 (10)	309 (90)
JSS 59	100 (30)	235 (70)
JSS 60	39 (11)	303 (89)

Note. Numbers in parentheses represent corresponding percentages for response frequencies.

TABLE 17 (continued)

Summary of Item Response Frequencies and Percentages (n=345) for Each Job Satisfaction Survey Item

JSS Item	"No"	"Yes"
JSS 61	76 (22)	263 (78)
JSS 62	53 (15)	289 (85)
JSS 63	190 (55)	153 (45)
JSS 64	60 (18)	279 (82)
JSS 65	75 (22)	265 (78)
JSS 66	55 (16)	284 (84)
JSS 67	115 (35)	217 (65)
JSS 68	126 (38)	208 (62)
JSS 69	36 (11)	303 (89)
JSS 70	95 (28)	245 (72)
JSS 71	42 (12)	298 (88)
JSS 72	246 (72)	95 (28)
JSS 73	36 (11)	300 (89)
JSS 74	123 (36)	220 (64)
JSS 75	101 (53)	160 (47)
JSS 76	119 (35)	221 (65)
JSS 77	39 (11)	302 (89)
JSS 78	22 (06)	320 (94)
JSS 79	8 (02)	334 (98)
JSS 80	4 (01)	339 (99)

Note. Numbers in parentheses represent corresponding percentages for response frequencies.

TABLE 17 (continued)

Summary of Item Response Frequencies and Percentages (n=345) for Each Job Satisfaction Survey Item

JSS Item	"No"	"Yes"
JSS 81	4 (01)	340 (99)
JSS 82	32 (09)	312 (91)

Note. Numbers in parentheses represent corresponding percentages for response frequencies.

APPENDIX F

TABLE 18

Mean National Percentile Reading, Math and Composite Ranks on Science Research Associates (SRA) Achievement Series for Sample Schools (n=47 schools)

School	Percentile Rank		
	Composite	Reading	Math
1	59.7	49.0	65.7
2	31.8	29.3	36.8
3	37.0	38.3	39.5
4	56.0	58.3	44.3
5	32.5	35.5	53.0
6	17.2	29.5	31.2
7	21.3	39.3	41.5
8	38.0	51.5	48.0
9	22.3	33.5	48.5
10	17.4	38.1	34.6
11	18.7	29.0	42.7
12	39.3	34.3	44.7
13	27.0	33.0	41.0
14	16.7	26.2	33.7
15	33.0	19.3	32.0
16	38.0	38.7	45.3
17	21.0	22.8	25.6
18	17.7	29.7	39.0
19	51.3	41.9	59.6
20	39.2	34.2	44.8

TABLE 18 (continued)

Mean National Percentile Reading, Math and Composite Ranks on Science Research Associates (SRA) Achievement Series for Sample Schools (n=47 schools)

School	Percentile Rank		
	Composite	Reading	Math
21	51.8	43.5	52.8
22	47.8	41.3	49.2
23	59.0	46.0	64.0
24	68.2	65.8	67.0
25	32.0	22.0	40.3
26	38.2	27.4	42.0
27	46.0	33.8	51.5
28	53.8	44.3	60.5
29	66.0	57.0	68.8
30	55.3	45.0	59.5
31	49.3	38.5	55.8
32	60.8	53.5	58.8
33	61.4	55.4	60.8
34	41.2	33.0	47.3
35	75.6	70.0	75.8
36	51.4	43.2	56.2
37	56.0	48.0	54.7
38	37.0	28.0	42.0
39	54.0	44.7	55.7
40	64.3	60.5	66.5

TABLE 18 (continued)

Mean National Percentile Reading, Math and Composite Ranks on Science Research Associates (SRA) Achievement Series for Sample Schools (n=47 schools)

School	Percentile Rank		
	Composite	Reading	Math
41	57.0	51.6	58.4
42	55.5	47.3	61.0
43	74.3	67.3	74.5
44	54.8	52.4	55.3
45	70.8	64.5	72.3
46	70.0	67.0	71.0
47	44.4	43.0	46.3
GRAND MEAN	45.4	42.3	51.6

APPENDIX G

TABLE 19

Student Average Daily Attendance (ADA) for Sample Schools (n=47 schools)

School	ADA
1	96.3
2	95.4
3	95.8
4	96.2
5	96.3
6	96.8
7	96.2
8	96.0
9	96.5
10	96.7
11	96.1
12	96.1
13	94.2
14	97.3
15	97.2
16	96.4
17	96.7
18	95.2
19	94.8
20	96.2
21	95.0
22	95.9

TABLE 19 (continued)

Student Average Daily Attendance (ADA) for Sample Schools (n=47 schools)

School	ADA
23	95.2
24	95.6
25	95.6
26	96.1
27	94.4
28	95.6
29	96.8
30	96.9
31	96.2
32	96.2
33	94.0
34	96.0
35	96.8
36	95.8
37	94.1
38	95.6
39	95.6
40	95.0
41	96.0
42	96.0
43	94.4
44	95.0

TABLE 19 (continued)

Student Average Daily Attendance (ADA) for Sample Schools (n=47 schools)

School	ADA
45	96.2
46	94.4
47	92.6
GRAND MEAN	95.73
TOTAL S. D.	0.95

APPENDIX H

TABLE 20

Summary of Factor Loadings for Two-Factor and One-Factor Solutions for the PZAI
(n=340)

PZAI Item	Two-Factor Solution		One-Factor Solution
	Factor I	FactorII	Factor I
PZAI 1	.77	.32	.78
PZAI 2	.79	.14	.79
PZAI 3	.72	.42	.74
PZAI 4	.78	.38	.79
PZAI 5	.75	.06	.76
PZAI 6	.79	.12	.79
PZAI 7	.81	.34	.82
PZAI 8	.78	.15	.77
PZAI 9	.78	.17	.77
PZAI 10	.79	.20	.78
PZAI 11	.78	.11	.78
PZAI 12	.86	.23	.78
PZAI 13	.82	.39	.81
PZAI 14	.82	.36	.81
PZAI 15	.65	.08	.65

TABLE 21
Summary of Factor Loadings for Three-Factor Solution for the PPDS - Teacher Form (n=327)

PPDS Item	Three-Factor Solution		
	Factor I	Factor II	Factor III
PPDS 1	.73	-.38	.32
PPDS 2	.76	-.11	.12
PPDS 3	.72	-.16	.08
PPDS 4	.73	.11	.07
PPDS 5	.72	.03	-.01
PPDS 6	.74	-.19	.10
PPDS 7	.78	-.24	-.12
PPDS 8	.75	-.40	.01
PPDS 9	.77	-.37	.06
PPDS 10	.80	-.22	-.02
PPDS 11	.81	-.21	-.16
PPDS 12	.78	-.05	-.27
PPDS 13	.82	-.13	-.23
PPDS 14	.84	-.25	-.12
PPDS 15	.83	-.29	.07
PPDS 16	.82	-.20	-.09
PPDS 17	.82	-.19	-.15
PPDS 18	.83	-.15	.01
PPDS 19	.73	-.31	.34
PPDS 20	.81	-.17	-.05

TABLE 21 (continued)
Summary of Factor Loadings for Three-Factor Solution for the PPDS - Teacher Form (n=327)

PPDS Item	Three-Factor Solution Factor I	Factor II	Factor III
PPDS 21	.76	-.12	-.26
PPDS 22	.77	.06	-.07
PPDS 23	.75	.03	-.27
PPDS 24	.80	-.14	-.14
PPDS 25	.80	-.22	-.10
PPDS 26	.81	-.32	.10
PPDS 27	.74	-.11	.09
PPDS 28	.75	.02	-.03
PPDS 29	.79	.15	-.07
PPDS 30	.67	.21	-.09
PPDS 31	.80	.17	-.10
PPDS 32	.77	.18	.01
PPDS 33	.82	-.11	.14
PPDS 34	.77	-.04	.14
PPDS 35	.72	-.03	.16
PPDS 36	.75	.16	.06
PPDS 37	.76	.12	.14
PPDS 38	.78	.17	.09
PPDS 39	.78	.05	.00
PPDS 40	.59	.41	.06

TABLE 21 (continued)
Summary of Factor Loadings for Three-Factor Solution for the PPDS - Teacher Form (n=327)

PPDS Item	Three-Factor Solution Factor I	Factor II	Factor III
PPDS 41	.71	.31	.03
PPDS 42	.72	-.07	.49
PPDS 43	.72	-.05	.26
PPDS 44	.79	-.15	.13
PPDS 45	.71	.18	.21
PPDS 46	.75	-.14	.35
PPDS 47	.71	.21	.08
PPDS 48	.63	.32	.24
PPDS 49	.75	.28	.05
PPDS 50	.70	.11	.39
PPDS 51	.73	.11	.31
PPDS 52	.72	.09	.32
PPDS 53	.68	.23	.06
PPDS 54	.73	.04	.08

TABLE 22
Summary of Factor Loadings for One-Factor Solution for the PPDS - Teacher Form (n=327)

PPDS Item	One-Factor Solution Factor I
PPDS 1	.72
PPDS 2	.76
PPDS 3	.71
PPDS 4	.74
PPDS 5	.72
PPDS 6	.74
PPDS 7	.77
PPDS 8	.74
PPDS 9	.76
PPDS 10	.79
PPDS 11	.80
PPDS 12	.78
PPDS 13	.81
PPDS 14	.83
PPDS 15	.83
PPDS 16	.81
PPDS 17	.81
PPDS 18	.82
PPDS 19	.73
PPDS 20	.80
PPDS 21	.75

TABLE 22 (continued)
Summary of Factor Loadings for One-Factor Solution for the PPDS - Teacher Form
(n=327)

PPDS Item	One-Factor Solution Factor I
PPDS 22	.77
PPDS 23	.74
PPDS 24	.79
PPDS 25	.79
PPDS 26	.81
PPDS 27	.74
PPDS 28	.75
PPDS 29	.79
PPDS 30	.67
PPDS 31	.80
PPDS 32	.78
PPDS 33	.82
PPDS 34	.77
PPDS 35	.72
PPDS 36	.75
PPDS 37	.77
PPDS 38	.79
PPDS 39	.78
PPDS 40	.61
PPDS 41	.73
PPDS 42	.73

TABLE 22 (continued)
Summary of Factor Loadings for One-Factor Solution for the PPDS - Teacher Form (n=327)

PPDS Item	One-Factor Solution Factor I
PPDS 43	.73
PPDS 44	.79
PPDS 45	.72
PPDS 46	.76
PPDS 47	.72
PPDS 48	.64
PPDS 49	.76
PPDS 50	.71
PPDS 51	.74
PPDS 52	.73
PPDS 53	.69
PPDS 54	.74

TABLE 23

Summary of Factor Loadings for Three-Factor Solution for the JSS (n=345)

JSS Item	Factor I	Factor II	Factor III
JSS 1		.45	
JSS 2		.40	
JSS 3		.47	
JSS 4		.42	
JSS 5			
JSS 6		.52	
JSS 7		.50	
JSS 8			
JSS 9			
JSS 10	.38		
JSS 11		.59	
JSS 12			
JSS 13		.44	
JSS 14		.52	
JSS 15		.58	
JSS 16		.39	
JSS 17		.48	
JSS 18		.64	

Note. All loadings which were .30 or less were omitted.

TABLE 23 (continued)

Summary of Factor Loadings for Three-Factor Solution for the JSS (n=345)

JSS Item	Factor I	Factor II	Factor III
JSS 19		.50	
JSS 20			.55
JSS 21			.55
JSS 22			.61
JSS 23			.54
JSS 24			
JSS 25			.36
JSS 26			
JSS 27			
JSS 28			
JSS 29			
JSS 30	.46		
JSS 31	.55		
JSS 32	.56		
JSS 33	.55		
JSS 34	.56		
JSS 35	.51		
JSS 36	.67		

Note. All loadings which were .30 or less were omitted.

TABLE 23 (continued)

Summary of Factor Loadings for Three-Factor Solution for the JSS (n=345)

JSS Item	Factor I	Factor II	Factor III
JSS 37	.48		
JSS 38	.65		
JSS 39	.58		
JSS 40		.67	
JSS 41	.54		
JSS 42	.47		
JSS 43	.69		
JSS 44	.40		
JSS 45	.61		
JSS 46			
JSS 47	.61		
JSS 48	.62		
JSS 49	.40		
JSS 50	.63		
JSS 51			
JSS 52		.40	
JSS 53		.34	
JSS 54		.48	

Note. All loadings which were .30 or less were omitted.

TABLE 23 (continued)

Summary of Factor Loading for Three-Factor Solution for the JSS (n=345)

JSS Item	Factor I	Factor II	Factor III
JSS 55		.44	
JSS 56		.45	
JSS 57		.51	
JSS 58			
JSS 59		.32	.31
JSS 60			.42
JSS 61	.43		
JSS 62			.34
JSS 63			.50
JSS 64	.59		
JSS 65	.43		.38
JSS 66	.61		
JSS 67	.46		
JSS 68	.59		
JSS 69	.53		
JSS 70	.40		
JSS 71			
JSS 72			.43

Note. All loadings which were .30 or less were omitted.

TABLE 23 (continued)

Summary of Factor Loadings for Three-Factor Solution for the JSS (n=345)

JSS Item	Factor I	Factor II	Factor III
JSS 73			
JSS 74	.49		
JSS 75	.44		
JSS 76	.59		
JSS 77			
JSS 78			
JSS 79			
JSS 80			
JSS 81			
JSS 82			

Note. All loadings which were .30 or less were omitted.

TABLE 24

Summary of Morris' (1986) Factor Loadings for Three-Factor Solution for the JSS (n=579)

JSS Item	Factors I	II	III
JSS 76 (8)			
JSS 77 (9)		.43	
JSS 78 (10)		.48	
JSS 79 (11)		.63	
JSS 80 (71)		.62	
JSS 81 (12)			
JSS 82 (13)			
JSS 83 (14)		.59	
JSS 84 (15)		.59	
JSS 85 (16)		.67	
JSS 86 (17)		.62	
JSS 87 (18)		.67	
JSS 88 (19)		.38	
JSS 89 (20)			-.63
JSS 90 (72)			.47
JSS 91 (21)			.65
JSS 92 (22)			.61
JSS 93 (23)			.69
JSS 94 (27)		.32	

Note. Numbers in parentheses represent corresponding item numbers for the JSS used in this study.

TABLE 24 (continued)

Summary of Morris' (1986) Factor Loadings for Three-Factor Solution for the JSS (n=579)

JSS Item	Factors I	II	III
JSS 95 (28)		.31	
JSS 96 (29)			
JSS 97 (30)	.53		
JSS 98 (31)	.59		
JSS 99 (32)	.54		
JSS 100 (33)	.58		
JSS 101 (34)	.54		
JSS 102 (35)	.61		
JSS 103 (36)	.68		
JSS 104 (37)	.60		
JSS 105	.48		
JSS 106 (38)	.58		
JSS 107 (39)	-.53		
JSS 108 (40)			
JSS 109 (73)	.60		
JSS 110 (41)	.50		
JSS 111 (42)	.47		
JSS 112 (43)	.63		
JSS 113 (44)	.46		
JSS 114 (45)	.68		
JSS 115 (46)	.31		

TABLE 24 (continued)

Summary of Morris' (1986) Factor Loadings for Three-Factor Solution for the JSS (n=579)

JSS Item	Factors I	II	III
JSS 116 (47)	.64		
JSS 117 (48)	.42		
JSS 118 (49)	.50		
JSS 119 (50)	.59		
JSS 120 (51)	.32		
JSS 121 (52)	.33		
JSS 122 (53)	.30		
JSS 123 (54)			
JSS 124 (55)			
JSS 125 (56)			
JSS 126 (57)	.53		
JSS 127 (58)			
JSS 128 (59)		.47	
JSS 129 (60)			.39
JSS 130 (61)	.41		
JSS 131 (62)	.33		
JSS 132 (63)			.54
JSS 133 (64)			
JSS 134 (65)			
JSS 135 (66)	.43		
JSS 136 (67)			

TABLE 24 (continued)

Summary of Morris' (1986) Factor Loadings for Three-Factor Solution for the JSS (n=579)

JSS Item	Factors I	II	III
JSS 137 (68)	.63		
JSS 138 (69)	.68		
JSS 139 (70)	.60		
JSS 140 (74)	.48		
JSS 141 (75)	.33		
JSS 142 (77)			
JSS 143 (78)			
JSS 144 (79)		.38	
JSS 145 (80)			
JSS 146 (82)			
JSS 147 (81)		.39	

APPENDIX I

Final Job Satisfaction Scale - Version Identified Through Factor Analytic Procedures

This section contains statements regarding your feelings and attitudes about your work and your plans for the future. Read each statement and decide how you feel about it. Some of the questions are very similar but have somewhat different meanings, so answer every question even though you may feel that it has already appeared in the list.

DIRECTIONS:
A. Read each statement carefully.
B. Decide whether you agree or disagree with the statement.
C. Circle "Y" (Yes) if you agree or "N" (No) if you disagree. Circle only one response.

Subscale I - Perceptions of The Job

MY PRESENT JOB:

1. (30) gives me more real personal satisfaction than the things I do in my spare time.....Y N
2. (31) makes me feel that I must look outside my work for those things that make life worthwhile and interesting.....Y N
3. (32) is so interesting that it is on my mind a lot when I am not at work.....Y N
4. (33) is so interesting that I talk about it a great deal after working hours.....Y N
5. (34) makes me feel that my life would seem empty without my work to occupy me.....Y N
6. (35) makes me feel that I would continue to work if it were not financially necessary.....Y N
7. (36) makes me feel really interested in my job.....Y N
8. (37) makes me feel that I selected the wrong occupation.....Y N
9. (38) is in an area of work I wish to remain in permanently.....Y N
10. (39) would be chosen over any other line of work, if I had the choice.....Y N
11. (41) makes me badly flustered and jittery.....Y N
12. (42) makes me come home upset, angry, or irritable.....Y N
13. (43) makes me come home with a feeling of satisfaction over work well done.....Y N
14. (44) makes me frequently discouraged.....Y N
15. (45) makes me generally happy and cheerful.....Y N
16. (46) makes me worry a lot daily.....Y N
17. (47) is the kind I gladly return to after a vacation.....Y N
18. (48) is worthwhile and important.....Y N
19. (49) utilizes my abilities.....Y N
20. (50) makes me proud of my job and my work.....Y N
21. (51) makes me ashamed.....Y N

Note. Numbers in parentheses represent item numbers on the JSS version used in the data collection phase of this study.

MY PRESENT JOB:

22. (52) is respected by my family and friends.....Y N
23. (53) demands the general respect of people.....Y N
24. (57) is too confining to suit me.....Y N
25. (61) gives me enough varied experiences.....Y N
26. (62) ties me down or restricts my freedom too much.....Y N
27. (66) is a lifetime career.....Y N
28. (68) offers more satisfaction the longer I have it.....Y N
29. (69) makes me feel that I have been successful thus far in my career.....Y N
30. (70) makes me feel less satisfied with my work as time goes on.....Y N
31. (73) makes me sorry that I have it now.....Y N

IF I COULD, I WOULD:

32. (74) like to secure a different job, either in the same or another occupation.....Y N
33. (75) decline an opportunity to change my present job for one of equal pay, security and status.....Y N

Subscale II - Perceptions of Fellow Employees/Colleagues

MY PRESENT JOB:

1. (9) allows me to make real and lasting friends among my working associates.....Y N
2. (10) permits me to work with associates who stimulate me to do better work.....Y N
3. (11) permits me to know where I stand with my employer.....Y N
4. (14) permits people under whom I work to make available the materials, information, and the assistance I need to do my best work.....Y N
5. (15) permits the people under whom I work desirous of and willing to make improvements in my working conditions.....Y N
6. (16) permits adequate explanation of policies and problems of the people under whom I work.....Y N
7. (17) permits me to get along satisfactorily with the people under whom I work.....Y N
8. (18) permits respect and regard for the people under whom I work.....Y N
9. (19) permits the people under who I work to make unfair demands on my free time.....Y N
10. (27) makes me feel as efficient as the average person with whom I work.....Y N
11. (28) makes me feel that there is no prejudice toward my age group in my occupation (e.g. that I am too old or too young).....Y N
12. (59) offers pleasant work surroundings.....Y N
13. (71) makes me feel at ease in the presence of the people under whom I work.....Y N

I FEEL THAT I:

14. (79) have an adequate understanding of what is expected of me in my present job.....Y N
15. (81) generally get along well with the persons with whom I work with on my present job.....Y N

Subscale III - Perceptions of Financial Incentives

MY PRESENT JOB:

1. (20) makes me feel I am paid a fair salary for the work I do....Y N
2. (21) provides sufficient income to meet my financial obligations and to support my family.....Y N
3. (22) does not allow me to dress as I like because of insufficient income.....Y N
4. (23) does not allow me to live as I would like because of insufficient income.....Y N
5. (60) forces me to live in home surrounding which are uncomfortable or inadequate according to my standards.....Y N
6. (63) helps me toward the financial goals I have set for myself.....Y N
7. (72) enables me to get the promotions and pay increases which I feel I deserve.....Y N

APPENDIX J

TABLE 25

Location of Items Within the Subscales
of the Job Satisfaction Scale

Subscale	Item Numbers
Perceptions of the Job	30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 57, 61, 62, 66, 68, 69, 70, 73, 74, 75
Perception of Fellow Employees/ Colleagues	9, 10, 11, 14, 15, 16, 17, 18, 19, 27, 28, 59, 71, 79, 81
Perceptions of Financial Incentives	20, 21, 22, 23, 60, 63, 72

VITA

John Aaron was born to Simon and Augustine Jackson on November 22, 1955. After graduating from Lake Charles High School in Lake Charles, Louisiana in May of 1973, he attended McNeese State University where he majored in Biology Education. John received his B. S. degree from McNeese and began teaching physical science and chemistry in several schools in Calcasieu Parish. He re-entered McNeese State University in 1978 and completed his Master of Education and Specialist Degrees in Educational Administration and Supervision in 1979 and 1982, respectively.

In August, 1983 John married the former Carolyn Ann Hardy. In that same year, he began work in a doctoral program toward the degree of Doctor of Education in Administration and Supervision. John is presently teaching at Sulphur High School in Sulphur, Louisiana. He has one daughter, Chalondra, and one son, Errol.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: John Aaron Jackson

Major Field: Educational Administration

Title of Dissertation: The Relationship Between Teachers' Perceptions of Principals' Job Performance, Teacher Job Satisfaction, Principal Influence and School Outcomes.

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

November 19, 1986